

BLACKWELL
RURAL DISTRICT COUNCIL.



ANNUAL REPORT

FOR

1907.

BY

JOHN O. LITTLEWOOD, D. P. H.,

MEDICAL OFFICER OF HEALTH.

MANSFIELD:

PLUMBE & RICHARDSON, LTD., SHERWOOD PRESS—164980
1908.

Rural District Council of Blackwell.



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To the Chairman and Members
OF
The Blackwell Rural District Council.

GENTLEMEN,

I have the honour to submit for your consideration my Annual Report on the General Sanitary Condition of your District for the year 1907, being the sixteenth such report which I have prepared since I have acted as your Medical Officer of Health. It has been my custom for several years past to divide my report practically into two parts; in the first part matters generally were dealt with, the second half was devoted to the consideration of the Parishes individually.

On the present occasion I have deviated somewhat from that plan, and instead of devoting a space to each Parish of the District, I have endeavoured to incorporate all points of interest and importance under special headings. This course should have the advantage of showing at a glance the amount of work done in each department during the year and at the same time shortening somewhat the length of the report without in any way curtailing the information.

I am, Gentlemen,

Yours obediently,

J. O. LITTLEWOOD.

TABLE I.—Vital Statistics of Whole District during 1907 and previous years.

Year.	Population estimated to middle of each Year.	Births			Total Deaths Registered in the District.				Total Deaths in Public Institutions in the District.				Deaths of Non-residents registered in Public Institutions beyond the District.		Net Deaths at all Ages belonging to the District.	
		Number.		Rate *	Deaths under One Year of Age.		Deaths at all Ages.		Public Institutions	Deaths of Non-residents registered in Public Institutions	Deaths of Residents registered in Public Institutions beyond the District.	Deaths of Non-residents registered in Public Institutions beyond the District.	Deaths of Residents registered in Public Institutions beyond the District.	Deaths of Non-residents registered in Public Institutions beyond the District.	Rate*	Number.
					Number.	Rate per 1,000 Births Registered.	Number.	Rate.*								
1	2	3	4		5	6	7	8	9	10	11	12	13			
1897	22464	942	41.9		153	162.4	363	16.1								
1898	24435	1044	42.7		177	169.5	383	15.7								
1899	25818	1099	42.5		189	171.9	430	16.6								
1900	27384	1155	42.2		186	159.5	481	17.5								
1901	28846	1230	42.6		230	188.5	475	16.4								
1902	31679	1407	44.4		208	147.8	468	14.7								
1903	33477	1327	39.6		235	177.0	523	15.6								
1904	34673	1326	38.2		213	160.6	480	13.8								
1905	25673	1324	37.1		187	141.2	446	12.6	..	..	3	449	12.5			
1906	36221	1290	35.6		171	132.5	427	11.8	..	..	6	433	11.9			
Average for years 1897-1906	30067	1141	42.6		185	161.1	433	16.2								
1907	37133	1376	37.05		220	159.8	569	15.3	..	..	10	579	15.5			

* Rates in Columns 4, 8 and 13 calculated per 1,000 of estimated population.

No. 1.—The deaths to be included in Column 7 of this Table are the whole of those registered during the year as having actually occurred within the district or division. The deaths to be included in Column 12 are the number in Column 7, corrected by the subtraction of the number in Column 10 and the addition of the number in Column 11.

By the term "Non-residents" is meant persons brought into the district on account of sickness or infirmity, and dying in public institutions there; and by the term "Residents" is meant persons who have been taken out of the district on account of sickness or infirmity, and have died in public institutions elsewhere.

The "Public Institutions" to be taken into account for the purposes of these Tables are those into which persons are habitually received on account of sickness or infirmity, such as hospitals, workhouses, and lunatic asylums. A list of the Institutions in respect of the deaths in which corrections have been made should be given on the back of this Table.

I. Institutions within the District receiving sick and infirm persons from outside the District.	II. Institutions outside the District receivin sick and infirm persons from the District.	III. Other Institntions, the deaths of which have been distributed among the several localities in the District.
	<p>Penmore Isolation Hospital, Hasland.</p> <p>Spital Small Pox Hospital, Hasland.</p> <p>Morton Isolation Hospital.</p> <p>Mastin Moor Isolation Hospital, Staveley.</p> <p>Mansfield Union Workhouse.</p> <p>Mansfield Accident Hospital.</p> <p>Nottingham General Hospital.</p> <p>Chesterfield and North Derbyshire Hospital.</p> <p>Mickleover Asylum.</p>	<p>Nursing Home, St. George's, Hanover Square, London.</p> <p>Children's Hospital, Western Bank, Sheffield.</p>
Is the Union Workhouse within the District ?		No.

TABLE II.

Vital Statistics of Separate Localities during 1907 and previous years.

Names of Localities.	S. NORMANTON.					BLACKWELL.					TIBSHELF.					PINXTON.					PLEASLEY.				
	Population esti- mated to middle of each year.	Births Registered.	Deaths at all Ages.	Deaths under 1 year.	Population esti- mated to middle of each year.	Births Registered.	Deaths at all Ages.	Deaths under 1 year.	Population esti- mated to middle of each year.	Births Registered.	Deaths at all Ages.	Deaths under 1 year.	Population esti- mated to middle of each year.	Births Registered.	Deaths at all Ages.	Deaths under 1 year.	Population esti- mated to middle of each year.	Births Registered.	Deaths at all Ages.	Deaths under 1 year.					
1897 ..	4802	220	95	40	3768	176	58	25	3145	123	39	17	2779	96	37	19	1452	74	20	11					
1898 ..	4897	217	81	39	3868	176	40	20	3220	122	56	19	2835	88	43	12	1512	59	24	10					
1899 ..	4993	203	103	42	3969	176	51	22	3295	122	49	19	2892	92	40	11	1584	59	28	10					
1900 ..	5088	231	80	33	4069	158	57	15	3371	134	50	16	2948	112	45	19	1727	64	28	13					
1901 ..	5184	237	93	46	4170	158	71	24	3446	128	56	23	3005	128	45	22	1776	70	18	9					
1902 ..	5431	253	98	39	4298	181	59	17	3668	132	45	19	3718	145	68	29	1776	83	21	8					
1903 ..	5645	216	99	34	4388	179	60	22	3715	153	70	32	3881	133	52	18	1776	64	27	17					
1904 ..	5948	252	95	45	4441	160	57	16	3768	137	47	21	4381	151	60	24	1786	61	24	7					
1905 ..	6115	230	95	39	4473	140	53	18	3874	138	47	15	4396	161	55	25	1791	56	9	4					
1906 ..	6141	221	74	36	4484	139	38	12	3890	126	38	9	4927	148	71	22	1791	56	20	6					
Averages of years 1897 to 1906.	5424	228	91	39	4193	164	54	19	3539	131	49	19	3576	125	52	20	1698	65	22	9					
1907 ..	6177	246	102	38	4516	141	49	14	3906	146	58	21	4983	156	79	25	1791	68	16	4					

TABLE II.—(Continued).

Names of Localities.	SHIREBROOK.				SCARCLIFFE.				AULT HUCKNALL.				LANGWITH.				GLAPWELL.			
	Population esti- mated to middle of each year.	Births Registered.	Deaths at all Ages.	Deaths under 1 year.	Population esti- mated to middle of each year.	Births Registered.	Deaths at all Ages.	Deaths under 1 year.	Population esti- mated to middle of each year.	Births Registered.	Deaths at all Ages.	Deaths under 1 year.	Population esti- mated to middle of each year.	Births Registered.	Deaths at all Ages.	Deaths under 1 year.	Population esti- mated to middle of each year.	Births Registered.	Deaths at all Ages.	Deaths under 1 year.
YEAR.																				
1897 ..	2579	122	53	27	2010	81	26	5	1510	39	27	8	318	8	7	1	101	3	1	<i>nil</i>
1898 ..	3998	190	78	47	2149	119	39	24	1529	61	17	5	325	9	4	1	104	3	1	"
1899 ..	4812	258	103	66	2286	127	34	16	1549	52	19	4	332	7	3	2	106	3	0	"
1900 ..	5742	292	144	61	2423	106	48	21	1568	58	25	8	339	8	4	0	109	3	0	"
1901 ..	6660	313	125	73	2560	143	36	23	1588	55	30	10	346	6	4	0	111	2	0	"
1902 ..	8056	373	108	74	2682	170	44	21	1593	54	16	<i>nil</i>	346	14	6	1	111	2	3	"
1903 ..	8798	393	125	75	2687	125	53	31	1836	51	25	3	640	9	12	2	111	2	0	"
1904 ..	9071	362	124	67	2687	132	51	23	1840	44	18	5	640	26	7	5	111	1	0	"
1905 ..	9231	392	126	65	2702	127	33	14	1840	56	19	6	640	22	6	1	111	2	3	"
1906 ..	9695	411	128	60	2702	125	38	19	1840	47	19	6	640	15	6	1	111	2	6	"
Averages of years 1897. to 1906.	6864	311	111	61	2489	126	40	20	1669	52	21	5	457	12	6	1	109	2	1	0
1907 ..	10449	397	179	88	2707	145	49	15	1840	51	36	11	653	21	11	4	111	4	0	0

TABLE II.—(Continued).

Names of Localities	S. NORMANTON.				BLACKWELL.				TIBSFELD.				PINXTON.				PLEASLEY.			
	Population esti- mated to middle of each year.	Birth-rate per 1000 population.	Death-rate per 1000 population.	Infantile Death- rate per 1000 Births.	Population esti- mated to middle of each year.	Birth-rate per 1000 population.	Death-rate per 1000 population.	Infantile Death- rate per 1000 Births.	Population esti- mated to middle of each year.	Birth-rate per 1000 population.	Death-rate per 1000 population.	Infantile Death- rate per 1000 Births.	Population esti- mated to middle of each year.	Birth-rate per 1000 population.	Death-rate per 1000 population.	Infantile Death- rate per 1000 Births.				
1897 ..	4802	45.8	19.7	181.8	3768	46.7	15.4	142.0	3145	39.1	12.4	138.2	2779	34.5	13.3	197.9	1452	50.9	13.8	148.6
1898 ..	4897	44.3	16.5	179.7	3868	45.6	10.3	113.6	3220	37.8	17.4	155.7	2835	31.0	15.1	136.3	1512	39.0	15.9	169.5
1899 ..	4993	40.6	20.6	206.9	3969	44.3	12.8	125.0	3295	37.0	14.8	155.7	2892	31.8	13.8	119.6	1584	37.2	17.7	169.5
1900 ..	5088	45.4	15.7	142.8	4069	38.8	14.0	94.9	3371	39.7	14.8	119.4	2948	38.0	15.2	169.6	1727	37.0	16.2	203.1
1901 ..	5181	45.7	17.9	194.1	4170	37.8	17.5	151.9	3446	34.2	16.2	194.9	3005	42.5	15.0	171.9	1776	39.4	10.1	128.5
1902 ..	5431	46.5	18.0	154.1	4298	42.1	13.7	93.9	3668	35.9	12.2	144.	3718	39.0	18.2	200.0	1776	41.1	11.8	96.3
1903 ..	5645	38.2	17.5	157.4	4388	40.8	13.7	123.0	3715	41.2	18.8	204.1	3881	34.3	13.4	135.3	1776	36.0	15.2	265.5
1904 ..	5948	42.4	16.0	178.5	4441	36.0	12.8	100.0	3768	35.0	12.4	153.3	4381	34.4	13.7	159.0	1786	34.1	13.4	114.7
1905 ..	6115	37.6	15.5	162.5	4473	31.2	11.8	128.5	3874	35.6	12.1	108.7	4896	32.8	11.2	155.2	1791	31.2	5.0	71.4
1906 ..	6141	35.9	12.4	162.9	4484	31.0	8.5	96.3	3890	32.3	4.7	71.4	4927	30.0	14.4	148.6	1791	31.2	11.2	107.1
Averages of years 1897 to 1906	5124	42.2	16.9	172.7	4193	39.4	13.0	115.9	3539	36.7	14.0	145.0	3576	34.8	14.3	155.3	1698	32.7	13.0	147.4
1907	6177	39.8	14.7	151.4	4516	31.2	11.9	99.2	3906	37.3	11.9	143.8	4943	31.3	15.8	160.2	1791	37.9	8.9	58.8

TABLE II.—(Continued).

Names of Localities.	SHIREBROOK.					SCARCLIFFE.					AULT HUCKNALL.					LANGWITH.					GLAPWELL.											
	Population esti- mated to middle of each year.	Birth-rate per 1000 population.	Death-rate per 1000 population.	Infantile Death- rate per 1000 Births.	Population esti- mated to middle of each year.	Birth-rate per 1000 population.	Death-rate per 1000 population.	Infantile Death- rate per 1000 Births.	Population esti- mated to middle of each year.	Birth-rate per 1000 population.	Death-rate per 1000 population.	Infantile Death- rate per 1000 Births.	Population esti- mated to middle of each year.	Birth-rate per 1000 population.	Death-rate per 1000 population.	Infantile Death- rate per 1000 Births.	Population esti- mated to middle of each year.	Birth-rate per 1000 population.	Death-rate per 1000 population.	Infantile Death- rate per 1000 Births.	Population esti- mated to middle of each year.	Birth-rate per 1000 population.	Death-rate per 1000 population.	Infantile Death- rate per 1000 Births.								
1897 ..	2579	47.3	20.5	221.3	2010	40.3	12.9	61.7	1510	25.9	17.8	205.1	318	25.1	22.0	125.0	101	29.7	10.1	101	318	25.1	22.0	125.0	101	29.7	10.1	101	318	25.1	22.0	125.0
1898 ..	3998	47.5	19.5	247.3	2149	55.3	18.1	201.7	1529	39.9	11.1	81.9	325	27.7	12.3	111.1	104	28.8	9.9	104	325	27.7	12.3	111.1	104	28.8	9.9	104	325	27.7	12.3	111.1
1899 ..	4812	53.6	21.4	255.8	2286	55.5	14.8	126.0	1549	36.5	12.2	76.9	332	23.1	9.0	285.7	106	28.3	9.6	106	332	23.1	9.0	285.7	106	28.3	9.6	106	332	23.1	9.0	285.7
1900 ..	5742	50.8	25.1	208.9	2423	43.7	19.8	198.1	1568	33.9	15.9	137.9	339	23.6	11.8	101	109	27.5	101	109	27.5	101	23.6	11.8	101	109	27.5	101	23.6	11.8	101	
1901 ..	6660	47.0	18.7	236.4	2560	55.8	14.4	160.8	1588	34.6	18.8	181.8	346	17.3	11.5	101	111	18.0	101	111	18.0	111	17.3	11.5	101	111	18.0	101	111	17.3	11.5	101
1942 ..	8056	46.3	13.4	198.3	2682	63.3	16.4	123.5	1593	33.9	10.0	101	346	40.4	17.3	71.3	111	18.0	101	111	18.0	111	40.4	17.3	71.3	111	18.0	101	111	40.4	17.3	71.3
1903 ..	8798	44.7	14.2	190.5	2687	46.9	19.3	246.0	1836	27.7	13.6	58.8	640	14.0	18.7	222.2	111	27.0	101	111	27.0	111	18.7	222.2	111	27.0	101	111	18.7	222.2	111	
1904 ..	9071	40.0	13.6	185.1	2687	49.1	19.3	174.2	1840	23.9	9.8	113.6	640	40.6	11.0	192.3	111	9.0	101	111	9.0	111	40.6	11.0	192.3	111	9.0	101	111	40.6	11.0	192.3
1905 ..	9231	42.4	13.6	165.8	2702	47.0	12.2	110.2	1840	30.4	10.3	107.1	640	34.3	9.3	45.4	111	18.0	27.0	111	640	34.3	9.3	45.4	111	18.0	27.0	111	640	34.3	9.3	45.4
1906 ..	9695	42.3	13.3	143.5	2702	46.2	14.8	151.1	1840	35.5	10.3	127.6	640	23.4	9.3	66.6	111	18.0	9.0	111	640	23.4	9.3	66.6	111	18.0	9.0	111	640	23.4	9.3	66.6
Averages of years 1897 to 1906.	6864	46.1	17.3	205.2	2489	50.3	16.2	155.3	1669	32.3	12.8	109.0	457	26.7	13.2	111.9	109	22.1	6.5	109	457	26.7	13.2	111.9	109	22.1	6.5	109	457	26.7	13.2	111.9
1207 ..	10449	37.9	17.1	221.6	2707	53.9	18.1	102.7	1840	27.7	19.5	251.7	653	32.1	16.8	190.5	111	36.0	101	111	653	32.1	16.8	190.5	111	36.0	101	111	653	32.1	16.8	190.5

TABLE III.

Cases of infectious Disease notified during the Year 1907.

Notifiable Disease.	Cases notified in Whole District.							Total Cases Notified in each Locality.								* No. of Cases Removed to Hospital from each Locality.								Total Cases removed to Hospital.		
	At Ages†—Years.							Blackwell	S. Nornanton	Pinxton	Tibshelf	Shirebrook	Plesley	Searcliffe	A. Hucknall	Langwith	Glapwell									
	At all Ages.	Under 1	1 to 5	5 to 15	15 to 25	25 to 65	65 and up-wards.																			
Small-pox.....	40	..	12	24	2	2	..	2	3	5	..	21	..	8	1											
Cholera.....																										
Diphtheria																										
Membranous croup																										
Erysipelas.....	36	2	3	2	8	18	3	2	2	3	..	7	2	13	5	2										
Scarlet fever.....	211	4	70	120	10	7	..	35	24	60	33	17	1	23	1	17										
Typhoid	19	..	2	3	7	7	..	..	2	7	..	4	2	3	1										
Enteric fever																										
Relapsing fever ..																										
Continued fever ..																										
Puerperal Fever ..	3	..	..	..	1	2	..	..	..	1	..	2													
Plague																										
Totals.....	309	6	87	149	28	36	3	39	31	76	33	51	5	47	8	19	12	7	43	26	11		9	1	6	113

NOTES.—The localities adopted for this table should be the same as those in Tables II. and IV.

State in space below the name of the isolation hospital, if any, to which residents in the district, suffering from infectious disease, are usually sent. Mark (H) the locality in which it is situated, or if not within the district, state where it is situated, and in what district. The name of the authority by whom the hospital is provided should also be given. Mark (W) the locality in which a workhouse is situated.

* This space may be used for record of other disease the notification (compulsory or voluntary) of which is in force in the district.

+ These age columns for notifications should be filled up in all cases where the Medical Officer of Health, by enquiry or otherwise, has obtained the necessary information.

** Column 8 should be filled up with the Totals of cases removed to Hospital, whether the District is divided into separate localities or consists of only one undivided area.

TABLE IV.—Causes of, and Ages

CAUSES OF DEATH.	Deaths at the subjoined Ages of Residents, whether occurring in or beyond the District						
	All Ages.	Undr 1 yr	1 and undr 5	5 & undr 15	15 & undr 25	25 & undr 65	65 & up- ward
1	2	3	4	5	6	7	8
Small Pox							
Measles	40	11	25	4	..	..	..
Scarlet Fever	4	..	1	3	..	..	..
Whooping Cough	20	11	9	..	..	..	..
Diphtheria & Mem. Croup ..	7	..	4	3	..	..	..
Croup							
Fever—Typhus							
„ Enteric	1	..	..	..	..	1	..
„ Other continued ..							
Epidemic Influenza	4	..	..	..	..	2	2
Cholera							
Plague							
Diarrhœa	15	10	5	..	..	..	..
Enteritis	5	3	..	..	..	1	1
Puerperal Fever	1	..	..	..	1	..	..
Erysipelas	2	2	..	..	..	..	..
Other septic diseases	1	..	..	..	1	..	..
Phthisis (Pulmonary Tuberculosis)	26	1	1	1	6	17	..
Other tubercular diseases ..	23	12	9	2	..	..	..
Cancer, malignant disease ..	20	..	..	..	..	14	6
Bronchitis	49	22	9	..	..	8	10
Pneumonia	79	28	25	4	4	13	5
Pleurisy							
Other diseases of Respiratory organs	2	1	1	..	..	..	..
Alcoholism							
Cirrhosis of liver }	5	..	..	..	..	4	1
Venereal diseases	4	1	..	1	..	2	..
Premature birth	21	21	..	..	..	..	..
Diseases and accidents of parturition	5	..	..	..	..	5	..
Heart diseases	34	1	1	3	1	21	7
Accidents	24	..	5	2	2	15	..
Suicides	4	..	..	..	2	2	..
Diseases of nervous system ..							
Influenza							
Acute Rheumatism	2	..	..	..	..	..	2
Old Age	35	..	..	..	..	..	35
All other causes	146	96	12	2	3	25	8
All causes	579	220	107	25	20	130	77

at, Death during Year 1907.

Deaths at all ages of "Residents" belonging to Localities, whether occurring in or beyond the District.										Outside District. 19
Normanton 9	Tibshelf 10	Pinxton 11	Blackwell 12	Shirebrook 13	Pleasley 14	Scarccliffe 15	Ault Hucknall 16	Langwith 17	Glapwell 18	
..	3	11	5	21						
..	..	4								
1	1	1	2	10	..	4	1			
1	..	2	..	3	..	1				
..	..	1								
1	1	..	1	..	1					
..	1	3	..	11						
..	..	..	1	4						
..	..	..	..	1						
..	..	2								
..	..	..	..	1						
8	5	3	..	9	..	1				
3	1	2	1	10	..	3	3			
4	6	4	..	2	..	3	1			
4	6	8	3	14	2	6	3	3		
21	9	10	3	25	1	5	5	3		
1	..	..	..	..	..	1				
1	3	..	..	1						
..	..	2	..	1	..	..	1			
3	2	1	1	8	2	2	1	1		
1		1	1	1	..	..	1			
8	3	4	4	6	1	3	5			
1	..	4	6	5	2	2	4			
1	..	..	..	..	1	..	..	2		
..	..	..	..	..	..	2				
7	2	4	7	3	4	4	3	1		
36	15	12	14	43	2	12	8	4		
102	58	79	49	179	16	49	36	11		

NOTES TO TABLES IV. AND V.

- (a) In Table IV. all deaths of "Residents" occurring in public institutions, whether within or without the district are to be included with the other deaths in the columns for the several age groups (columns 2-8). They are also, in columns 9-15, to be *included* among the deaths in their respective "Localities" according to the previous addresses of the deceased as given by the Registrars. Deaths of "Non-residents" occurring in public institutions in the district are in like manner to be *excluded* from columns 2-8 & 9-15 of Table IV.
- (b) See notes on Table I. as to the meaning of "Residents" and "Non residents," and as to the "Public Institutions" to be taken into account for the purposes of these Tables. The "Localities" in Table IV. should be the same as those in Tables II. and III.
- (c) All deaths occurring in public institutions situated within the district, whether of "Residents" or "Non-residents" are, in addition to being dealt with as in note (a), to be entered in the last column of Table IV. The total number in this column should equal the figures for the year in column 9, Table I.
- (d) The total deaths in the several "Localities" in columns 9-15 of Table IV. should equal those for the year in the same localities in Table II., sub columns c. The total deaths at all ages in column 2 of Table IV. should equal the gross total of columns 9-15, and the figures for the year in column 12 of Table I.
- *(e) Under the heading of "Diarrhœa" are to be included deaths registered as due to Epidemic diarrhœa, Epidemic enteritis, Infective enteritis, Zymotic enteritis, Summer diarrhœa, Dysentery and Dysenteric diarrhœa, Choleraic diarrhœa, Cholera and Cholera Nostras.
- In addition, and as regards deaths of children *under one year of age*, under the heading "Diarrhœa," in column 3 (Table IV.) are to be included all deaths classified as "Diarrhœal diseases" in Table V.
- Under the heading of "Enteritis" in Table IV., are to be included only deaths *over one year of age* registered as due to Enteritis. Muco-enteritis, Gastro-enteritis, Gastric catarrh, Gastritis, and Gastro-intestinal catarrh, unless from information obtained by enquiry from the certifying practitioner or otherwise, the Medical Officer of Health should have reason for including such deaths, under the specific term "Diarrhœa." Deaths from diarrhœa secondary to some other well-defined disease should be included under the latter.
- (f) Under the headings of "Cancer" and "Puerperal fever" should be included all registered deaths from causes comprised within these general terms. Thus: Under "Cancer" should be included deaths from Cancer, Carcinoma, Malignant disease, Scirrhus, Epithelioma, Sarcoma, Villous tumour, and Papilloma of bladder, Rodent ulcer. Under "Puerperal Fever" are to be included deaths from Pyæmia, Septicæmia, Sepsæmia, Pelvic peritonitis, Peri- and Endro-Metritis occurring in the Puerperium.

- (g) Under "Congenital Defects" in Table V. are to be included deaths from Atelectasis, Icterus neonatorum, Navel hæmorrhage, Malformations, and Congenital hydrocephalus.
- (h) Under "Tuberculous Meningitis" are to be included deaths from Acute hydrocephalus.
- (i) Under "Other Tuberculous Diseases" are to be included deaths from Tuberculosis, Tuberculosis of bones, joints and other organs, Lupus and Scrofula.
- (j) All deaths certified by registered Medical Practitioners, and all Inquest cases are to be classed as "Certified;" all other deaths are to be regarded as "Uncertified."

In recording the facts under the various headings of Tables I., II., III., IV. and V., attention has been given to the notes on the Tables.

JOHN O. LITTLEWOOD,

Medical Officer of Health.

* As regards infantile diarrhœa and Table V., it will suffice if Medical Officers of Health, who have already tabulated deaths of 1907 in accordance with the schedule of the Incorporated Society of Medical Officers of Health, enter all deaths under one year that they regard as due to diarrhœa under the single heading "Diarrhœa, all forms."

This having been done, it will be necessary that the entry against "Diarrhœa" in column 3 of Table IV. should tally with the sum of deaths under "Diarrhœa, all forms," entered in the final column of Table V.

TABLE V.—Infantile Mortality during the Year 1907.

Deaths from stated Causes in Weeks and Months under One Year of Age.

(See Notes at back of Table IV.)

CAUSE OF DEATH.		Under 1 week.	1-2 weeks.	2-3 weeks.	3-4 weeks.	Total under 1 month.	1-2 months.	2-3 months.	3-4 months.	4-5 months.	5-6 months.	6-7 months.	7-8 months.	8-9 months.	9-10 months.	10-11 months.	11-12 months.	Total Deaths under 1 year.
All Causes.	Certified	27	7	14	4	52	24	17	13	15	15	15	8	12	12	11	13	207
	Uncertified	8	0	0	1	9	..	..	..	..	..	1	1	1	1	..	..	13
Common Infectious Diseases.	Small-pox	..	..	..	..	..	..	..	..	..	..	2	1	..	1	1	6	11
	Chicken-pox	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Measles	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Scarlet Fever	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Diphtheria (including Membranous Croup)	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
* Diarrhoeal Diseases.	Whooping Cough	..	..	..	..	..	2	1	1	1	1	..	..	2	2	..	1	11
	Diarrhoea, all forms	..	..	..	..	..	1	1	..	3	2	1	..	..	2	..	..	10
	Enteritis, Muco-enteritis, Gastro-enteritis	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Gastritis, Gastro-intestinal Catarrh	..	..	..	1	1	1	1	..	..	..	..	..	..	..	..	..	3
Wasting Diseases.	Premature Birth	..	13	1	2	1	17	2	1	1	..	..	..	..	..	..	..	21
	* Congenital Defects	..	4	..	2	..	6	..	..	1	1	..	..	..	..	..	..	8
	Injury at Birth	..	4	..	..	..	4	..	..	..	..	..	..	..	..	..	..	4
	Want of Breast-milk, Starvation	..	..	1	..	..	1	2	..	..	..	..	..	..	..	..	..	3
	Atrophy, Debility, Marasmus	..	14	3	6	..	23	7	5	2	5	5	5	..	2	2	4	61
Tuberculous Diseases.	* Tuberculous Meningitis	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	1
	Peritonitis	..	..	..	..	..	..	1	1	1	..	..	..	..	1	..	..	4
	Tabes Mesenterica	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	* Other Tuberculous Diseases	..	..	..	..	..	..	..	2	..	1	..	1	1	1	2	..	8
Other Causes.	Erysipelas	..	..	..	1	1	..	..	..	..	..	..	1	..	..	..	..	2
	Syphilis	..	..	..	1	1	..	..	..	..	..	..	..	..	..	..	..	1
	Rickets	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Meningitis (not Tuberculous)	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Convulsions	..	..	2	..	1	3	2	1	..	..	2	2	..	1	..	..	11
	Bronchitis	..	..	..	2	..	2	5	3	2	..	2	..	2	2	..	2	22
	Laryngitis	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Pneumonia	..	..	..	..	..	..	2	3	3	4	2	4	..	4	1	2	28
	Suffocation, overlaying	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Other Causes	..	..	..	1	1	2	..	..	1	..	1	2	2	1	..	2	11
		35	7	14	5	61	24	17	13	15	15	16	9	13	13	11	13	220

Population (estimated to middle of 1907), 37,133.

1376 Births in the year { legitimate, 1329
 { illegitimate, 47

Deaths from all Causes at all Ages, 579.

PHYSICAL FEATURES OF THE DISTRICT.

A description of some of the chief physical features of a district must necessarily include some reference to its geological structure. Such an account may be an advantage to some, and cannot fail to interest all the members of the Council. To the geologist and antiquarian the County of Derby abounds in many treasures, but it is not to such treasures that I now wish specially to draw your attention.

The portion of the county in which you are more particularly interested is placed in the east, and forms a part of the Pennine chain, or back-bone of England. There are no hills of any great height, but the surface presents a somewhat irregular contour, very different from that found in the north-west, where high hills, deep ravines, and extensive dales are characteristic features. This great central or Pennine anticline throws off on the west the coal measures of Lancashire and North Staffordshire, and on the east the great coalfields of Yorkshire and Derbyshire.

For convenience of description the district may be divided into two parts, viz. : north and south. The southern part embraces the parishes of Pinxton, South Normanton, Blackwell, and Tibshelf, which are situated on the upper coal measures.

The depth at which coal is found varies in different parts. At Blackwell it appears on the surface, whilst in some of the adjacent parishes it is only found at considerable depths. As water-bearing strata, the upper coal measures are not satisfactory, the subsoil being too loose and shaly, and thus readily allowing of the free percolation of water. It is found that the range of rise and fall in some of the superficial wells exceeds many feet. The soil is heavy and loamy, and contains a large amount of moisture.

Passing on to the northern part of the district, which includes the parishes of Ault Hucknall, Glapwell, Scarcliffe, Langwith, Pleasley, and Shirebrook, we meet with the magnesian limestone as well as the coal measures. Portions of Ault Hucknall, Glapwell, and Scarcliffe are over-lapped by the former. It is quite obvious where one formation ends and the other begins : the line of demarcation is well marked by the escarpment which runs north and south, and is particularly well defined by the ridge which runs through Hardwick Park and skirts the hamlet of Palterton. Along the base of this escarpment numerous springs abound, and it is from these sources that Ault Hucknall (Doe Lea) derives its water supply.

The surface overlying the magnesian limestone differs from that of the coal measures in being more undulating in character. The subsoil is firmer, and the range of rise and fall in the wells is considerably less, The soil is drier, more sandy, and lighter in composition.

GENERAL VITAL STATISTICS OF THE DISTRICT.

Area and Population.---The area of the District has remained the same as was recorded for the year previous. The population has increased from 36,221 in 1906, to 37,133 in 1907, showing a total increase of 912 for the year now under consideration. With the exception of Shirebrook the population of the contributory parishes of the District have remained practically stationary. Building operations of an extensive character have been carried on during the whole of the year, and were confined almost entirely to that part of the parish known as New Bulwell.

A large portion of the property of Shirebrook is owned by private individuals, and is leased for a period of some years to the Shirebrook and Staveley Colliery Companies.

The number of houses newly erected in the District during the year was 160, as against 96 for the year previous. It has been found on enquiry that the number of unoccupied houses in the District is very small indeed and may fairly be regarded as a negligible quantity.

Area in Acres.	Population.	Persons per Acre.
21,239.	37,133	1.7

The Census Returns of 1861 showed the population of the District to be 6,685. The following figures are given for the purpose of showing the great increase which has taken place since that year, due almost entirely to the development of the coal mining industry:—

Census 1861.	Census 1871.	Census 1881.	Census 1891.	Census 1901.	Estimated Population. 1907.
6,685	7,947	12,746	16,858	28,735	37,133

The following figures show the number of houses in the District:—

1861	1871	1881	1891	1901	1907
1,302	1,575	2,410	3,077	5,514	6,861

**Table showing Acreage, Inhabited Houses,
Population, Births and Deaths of each Parish of the District,
For the Year ending December 31st., 1907.**

PARISHES.	Acres.	Inhabited Houses.	Populn	Births.	Deaths.	Deaths under 1 yr
Blackwell ...	1739	852	4516	141	49	14
Normanton ...	1934	1187	6177	246	102	38
Pinxton ...	1253	977	4983	156	79	25
Tibshelf ...	2371	737	3906	146	58	21
Pleasley ...	*1788	326	1791	68	16	4
Shirebrook ...	*1505	1798	10449	397	179	86
Scarliffe ...	3954	531	2707	146	49	15
Ault-Hucknall ...	4429	329	1840	51	36	11
Langwith ...	1492	105	653	21	11	4
Glapwell ...	774	18	111	4	0	0

* Estimated.

**Table Showing the Number of New Houses Erected
Annually since 1896.**

PARISHES.	1896.	1897.	1898.	1899.	1900.	1901.	1902.	1903.	1904.	1905.	1906.	1907.
Blackwell	26	5	16	4	11	16	27	17	10	6	2	6
Normantn	20	24	27	23	15	16	66	42	37	32	5	7
Tibshelf	6	22	10	10	8	18	37	34	10	20	3	3
Pinxton	9	9	8	4	2	123	55	32	100	99	6	11
Pleasley	38	24	11	13	26	9	0	0	2	1	0	0
Shirebr'k	156	102	258	148	169	167	151	135	47	24	80	130
Scarliffe	0	4	33	31	33	23	6	1	0	3	0	1
Ault-Hck'l	0	0	0	0	1	1	1	47	1	0	0	0
Langwith	0	0	0	0	0	5	0	48	0	0	0	2
Glapwell	0	0	0	0	0	0	0	0	0	0	0	0
Total ...	255	190	363	233	265	378	343	356	207	185	96	160

Births and Birth-rate.—The total number of births registered during the year was 1,376, showing an increase of 86 on the corresponding period of 1906.

The Birth-rate for the year was 36.7 per 1,000 of estimated population, being an increase of 1.1 on the year 1906.

The Birth-rate for England and Wales during the same period was 26.3 per 1,000 of population, and for Rural England and Wales 25.6 per 1,000.

It is no longer necessary to divide the contributory parishes of the District into sub-districts, as has been the invariable custom for years past.

The development of the coal in an easterly and north-easterly direction has had the effect of converting what were formerly purely agricultural areas into coal centres.

At the present time there is not a single parish in the District from which coal is not being extracted. This, combined with a very high rate of wages, is having the effect of attracting into the District a number of young and enterprising men, which undoubtedly has the effect of keeping up the high Birth-rate.

Deaths and Death-rate.—The actual number of deaths which took place in the District was 569. In addition to that number should be added 10 deaths in residents in public institutions beyond the District, thus making a total of 579. There are no public institutions in the District, consequently no deductions are to be made from that total.

On referring to the Table No. 1 the various institutions are given into which sick persons are habitually received from this District, and in which institutions deaths may occur from time to time.

It will be observed on referring to the same Table that the death-rate for the District was 15.3, but the corrected death-rate, which is the one always to be taken into account, stands at 15.59 per 1,000 of population.

The number of deaths during the year has increased from 433 in 1906 to 579 in 1907, thus showing an increase of 146 on the year previous.

When making these comparisons it should be borne in mind that the rate for 1906 was phenomenally low, and that although the rate has increased to 15.59 it is still only very slightly above the average for the ten preceding years. The rate for England and Wales for 1907 was 15.0, the rate for Rural England and Wales during the same period was 14.7 per 1,000 of population.

Infantile Mortality.—The number of deaths which took place in children under one year of age was 220, as against 171 for the year previous. The rate per 1,000 births was found to be 159.8, a figure considerably higher than that recorded for 1906, but slightly below the average for the ten preceding years. It should be pointed out that an infantile death-rate of 132.5 per 1,000 births in a district like the one we are now considering is low, but is still far above the ideal standard of 100 per 1,000 births.

For England and Wales 118, and for rural England and Wales 106 per 1000 births.

It is found that the rate in the suburbs of our larger towns differs as much as 50 per cent from that of the artisan quarters of the same town. This is due to the manner in which the children are clothed and fed, and the attention they receive at the first onset of sickness. Statistics show conclusively that children fed on the mother's milk not only have a better chance in the struggle for existence, but are better able to bear the legion of petty ailments specially affecting the young.

It is difficult to estimate the amount of suffering inflicted on children through the use of tuberculous-contaminated milk. It is

quite easy to show that milk supplied to our larger towns frequently contains the germs of tuberculosis. The character of the disease which arises through the consumption of such milk is peculiar, as it affects chiefly the glands, bones and brain of the young, apparently rendering the lungs more or less immune. Where hand-feeding has to be resorted to, the simple precaution of boiling the milk removes all danger.

I am convinced that if a nurse who has had experience in the management and feeding of infants were appointed to take charge of a certain area, she would be able to exercise a useful moral influence over the young and inexperienced mothers of the District, as well as rendering them very practical aid.

I think the Council would be well advised if they were to take into consideration the powers granted under the "Compulsory Notification of Births" Act of 1906. This Act enjoins that every child born in the District shall be notified to the Medical Officer of Health within forty-eight hours of its birth. This would enable Local Authorities to be more readily brought into touch with the infantile life of the District.

Table V. of this Report shows that 30 per cent of the mortality of infants occurs during the first month of life, the chief causes of death being prematurity of birth and debility. In the second and succeeding months of the first year bronchitis and pneumonia are the two diseases producing the greatest fatality. Of the 11 deaths attributed to "other causes," it was found that 6 were due to dention, 2 to eczema, 1 to jaundice, 1 to peritonitis, and 1 to paraplegia.

Table showing Infantile Mortality in the eight Parishes of the District undermentioned :—

	Normanton.	Blackwell.	Tibshelf.	Pinxton.	Pleasley.	Shirebr'k.	Scarliffe.	Ault Huckn'll.
1905...	169.5	128.5	108.7	155.2	71.4	165.8	110.2	107.1
1906...	162.9	86.3	71.4	148.6	107.1	146.0	152.0	127.6
1907...	154.4	99.2	143.8	160.2	58.8	221.6	102.7	215.7

It will be observed from the above returns that Shirebrook heads the list, with an infantile death-rate of 221.6 per 1,000 births.

This cannot be regarded as otherwise than deplorably high. The fact that Measles and Whooping Cough were prevalent in that Parish during the year goes far to explain this high mortality. Ault Hucknall and Pinxton, though not suffering so severely, have a rate far from satisfactory.

Zymotic Diseases and Rates of Mortality.—The returns furnished to me from the contributory parishes of the District under the Notification Act show that 311 cases of infectious diseases occurred during the year, as against 434 in the previous year. A perusal of Table III. will show that Scarlet Fever was far the most prevalent of the five notifiable diseases.

The seven Zymotic Diseases on which the zymotic death-rate is based are Small Pox, Scarlet Fever, Diphtheria, Typhoid Fever, Measles, Whooping Cough, and Diarrhœa. The number of deaths resulting from these diseases was 87, as against 49 for 1906, and was equivalent to a zymotic death-rate of 2.3 per 1000 of the population, higher than it has been since the year 1901.

This increased rate is due to the fact that during the year Measles and Whooping Cough were very prevalent in the District, particularly in Shirebrook. It happens from time to time in every part of the country that these two diseases take on an epidemic character, and up to now there appears to be no known satisfactory means of arresting their spread. They attack the young and produce infection in other children, in many instances before the primary case has been recognised.

Up to now, with the means at our disposal, it has appeared almost hopeless to try to prevent the spread of these maladies among school children, but the periodic examination of scholars under the new Act may enable the examining officer to obtain the earliest possible information, and so eliminate from a school the first traces of disease.

Deaths from the seven principal Zymotic Diseases.

		Number.		Rates of Mortality per 1,000 of Population.
1891	...	49	...	2.9
1892	...	55	...	3.1
1893	...	41	...	2.2
1894	...	35	...	1.8
1895	...	48	...	2.5
1896	...	93	...	4.3
1897	...	64	...	2.8
1898	...	62	...	2.5
1899	...	122	...	4.7
1900	...	102	...	3.7
1901	...	99	...	3.4
1902	...	63	...	1.9
1903	...	62	...	1.8
1904	...	61	...	1.75
1905	...	66	...	1.85
*1906	...	49	...	1.30
1907	...	97	...	2.6

* The lowest recorded for the last 15 years.

Table showing the Number of Cases Notified and Deaths from the principal Zymotic Diseases,
for the year 1907 and ten preceding years.

DISEASES.		1907		1906		1905		1904		1903		1902		1901		1900		1899		1898		1897	
		Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths
Notifiable.	SMALL POX ..	0	0	0	0	2	0	21	3	5	0	12	0	..	..	..	..	..	..	..	..	..	..
	SCARLET FEVER ..	211	4	272	6	119	4	124	3	81	0	78	1	187	5	210	3	188	2	152	4	127	4
	DIPHTHERIA ..	40	7	42	6	19	1	48	3	177	12	105	23	7	23	4	10	9	16	1	5	1	1
	ERYSIPELAS ..	36	2	50	1	36	1	37	0	54	1	48	5	46	2	46	1	34	0	32	0	27	0
	PUERPERAL FEVER ..	3	0	7	5	5	0	2	0	5	2	3	3	0	4	2	3	1	0	7	1	2	1
	TYPHOID FEVER ..	21	1	63	6	50	2	29	4	32	1	14	2	52	3	82	7	147	12	127	10	104	9
Non-Notifiable.	DIARRHOEA ..	15		22		34			16		27		26		67		36		52		42		26
	MEASLES ..	40		16		16			14		11		4		6		31		44		1		5
	WHOPPING COUGH ..	30		9					11		11		7		11		20		3		4		19
	INFLUENZA ..	4		5					4		3		6		5		7		6		6		0
	PHTHISIS ..	26		13					28		24		13		19		24		13		23		16

Cases of Infectious Diseases Notified during 1907.

The monthly distribution of cases was :—

	Small Pox.		Scarlet Fever.		Typhoid Fever.		Diphtheria.		Puerperal Fever.		Erysipelas.		Total.	
	1907	1906	1907	1906	1907	1906	1907	1906	1907	1906	1907	1906	1907	1906
January	0	0	15	25	1	6	5	0	1	1	8	6	30	38
February	0	0	38	11	3	4	2	1	0	0	2	5	45	21
March ...	0	0	18	16	2	5	3	3	1	3	0	1	24	28
April ...	0	0	18	8	1	1	3	0	0	0	2	3	24	12
May	0	0	11	13	5	3	7	1	0	0	3	1	26	18
June.....	0	0	11	7	0	4	4	1	0	0	5	3	20	15
July	0	0	11	22	0	4	5	2	1	0	1	4	18	32
August...	0	0	15	24	0	4	1	0	0	0	2	3	18	31
Septembr	0	0	13	54	4	14	1	7	0	0	4	2	22	77
October	0	0	17	32	2	9	0	14	0	3	2	9	21	67
Novembr	0	0	23	36	1	7	6	9	0	0	4	7	34	59
Decembr	0	0	21	24	2	2	3	4	0	0	3	6	29	36
	0	0	211	272	21	63	40	42	3	7	36	50	311	434

The Infectious Diseases (Notification) Act was adopted at a meeting of the Council held on the 7th November, 1889, but did not come into operation until January 1st, 1890. The cost of administering this Act in each complete year since its adoption was as follows:

Year.	Cases Notified.		£	s.	d.
1890	...	276	...	38	5 0
1891	...	272	...	38	15 0
1892	...	135	...	16	12 6
1893	...	324	...	39	10 0
1894	...	116	...	18	15 0
1895	...	92	...	11	12 6
1896	...	314	...	38	10 0
1897	...	268	...	30	7 6
1898	...	334	...	41	5 0
1899	...	382	...	47	0 0
1900	...	363	...	44	10 0
1901	...	306	...	37	17 6
1902	...	260	...	32	10 0
1903	...	354	...	44	5 0
1904	...	261	...	32	12 6
1905	...	232	...	29	0 0
1906	...	434	...	54	5 0
1907	...	313	...	39	2 6

£634 15 0

Form filled in in every case of Infectious Disease notified.

Disease.....
 Name of Patient..... Age.....
 Address
 Occupation..... Rent.....
 Medical Attendant..... First called in.....
 Notified
 No of Rooms—Living..... Sleeping.....
 No of Inmates—Adults..... Children..... Lodgers.....
 Day School Attending..... Sunday.....
 Milk Supply.....
 Water Supply*
 How Isolated.....
 Previous Illness of Patient
 Illness in Locality—Diarrhœa, Sore-throat, etc.
 How long Resident in House.....
 Recent Visits to other Houses.....
 Privy—Privy Midden..... Distance from Houses.....
 Do. do. Condition..... Construction.....
 Drainage
 Nuisances—Hen-houses, Piggeries, Stables, Cowsheds, Ditches,
 Stagnant Water, Manure, etc., requiring removal
 Probable Source of Infection
 Remarks

PRECAUTIONS ADOPTED.

Patient Removed to Hospital
 Schoolmaster Written to
 Date of Disinfection.....
 School Closed
 Termination } Date of Recovery.....
 of case } Date of Death

..... Inspector.

* If from well, note depth, and nearest possible source of pollution.

SCARLET FEVER.—The number of cases of Scarlet Fever brought under the notice of the Medical Officer of Health during the year by notification was 211, as against 272 for 1906. The whole of the District was attacked some time during the year, but Pinxton was the parish on which the brunt of the disease fell.

Regarding age incidence, the period between 5 and 15 years was the most fruitful of attack. The disease ran on from the previous year. The District appeared never to be entirely without cases. The number of houses invaded was 140. Particular attention has been given to the isolation of this disease, and no less than 104 cases were removed to one of the hospitals under the jurisdiction of the North Derbyshire Hospital Board. There have been two return cases in one family.

Four deaths occurred during the year, all of which were among the Pinxton cases. The case mortality was 1.9 per cent, as against 2.2 for the year 1906, and 3.3 for 1905. This gradual decline in the case mortality is certainly of an encouraging character, resulting I believe from the advantages of hospital treatment. The death-rate per 1,000 of population was .10, and the case rate per 1,000 was 5.6, both rates showing a considerable improvement on the records of the year previous.

The above figures are sufficient to justify any cost involved in isolation.

Before leaving this question of hospital treatment there is one other feature which is very likely to escape the recognition it deserves, viz.: that Scarlet Fever is a disease which not uncommonly gives rise to bad after consequences, which in too many instances make themselves felt for the rest of life. Statistics go to show that these sequelæ occur much less frequently in hospital than in home-treated cases.

ISOLATION HOSPITAL.—Of the total cases notified 48.8 per cent were isolated in one of the hospitals provided by the Joint Hospital Board at a cost of £540 16s., which is equal to £5 4s. per head, as against 36.7 per cent at a cost per head of £4 17s. 3d. for 1906.

Ample testimony is constantly forthcoming of the efficient and kindly manner in which the patients are treated during their stay in hospital. This District will very considerably benefit by the new hospital which is being erected in the parish of Upper Langwith.

Measures Taken for the Prevention of the Spread of the Disease.—On the receipt of a notification, every case was visited, and full particulars taken regarding the sanitary condition of the house and surroundings. When not removed to hospital, parents were given instructions how best to prevent the spread of the disease to others in the house. All infected rooms were fumigated with the vapour of formic aldehyde. School Authorities were advised of the cases, and instructed not to admit any children from the infected houses. The schools were visited, and the teachers interviewed, and advised on such lines as appeared to offer the best means of preventing the spread to other children in the school; such, for instance, as seeing that all pencils used by the children were placed in a 20 % solution of carbolic acid after being used each time; that clean towels were provided after morning and afternoon school, and that all drinking utensils were either done away with or boiled twice daily.

BLACKWELL.—With the exception of Pinxton this parish suffered the most severely of any of the contributory localities of the District, a precisely similar result occurring in the previous year. It was not until the fourth quarter of the year that the disease really became epidemic.

The returns go to show that practically all the cases occurring in the fourth quarter attended the same school. Primrose Hill and Westhouses, the other hamlets of the parish, having their own school area, practically escaped invasion.

SOUTH NORMANTON.—The 24 cases notified in this parish were of a sporadic nature, being evenly distributed throughout the whole of the year, no one part of the parish suffering more than another.

PINXTON.—

QUARTERLY DISTRIBUTION

1st Quar.	2nd Quar.	3rd Quar.	4th Quar.	Total.
48	10	2	0	60

A perusal of the above figures shows that as the year passed on the disease expended itself. This is only what one would anticipate when it is borne in mind that in the year previous no less than 94 cases were notified. It is satisfactory to note that at the end of the year the parish was entirely free from this disease. The same precautions which were taken in 1906 to arrest the spread of the disease, were continued into the year 1907.

Of the total cases notified 36 were removed to one of the Isolation Hospitals. This measure no doubt had some influence in arresting the spread of the disease, but until some better supervision of the school life of children is obtained, there is little hope of controlling a disease like Scarlet Fever, where to my mind the source of infection in nearly every instance lies in the school.

TIBSHELF.—Of the 33 cases notified in this parish, 26 were removed to one of the Isolation Hospitals. The second half of the year was the period when the disease was prevalent. The cases chiefly occurred among children attending the colliery schools.

SHIREBROOK.—Houses infected ... 12 Cases of Fever ... 17.
The disease was very mild in character. Byron-street and Sookholme-road were the localities chiefly involved. Nine of the cases were removed for isolation.

SCARCLIFFE.—Houses invaded ... 14 Cases of Fever ... 23.

Hillstown was the locality chiefly involved. Nine of the cases were removed for isolation.

UPPER LANGWITH.—Seventeen cases occurred in ten houses, six of these being in one house at the Maltcross, were removed for isolation.

SMALL-POX.—Two cases of this disease were notified during the year 1905. Since then the District has been free. It is satisfactory to note that the adjoining district parishes in the Chesterfield Union have also enjoyed complete immunity during 1907.

DIPHTHERIA.—

	1907.	1906.	Mean for 10 years. (1897–1906.)
Number of Cases	40	42	46.7
Number of Deaths	7	6	6.7
Death-rate per 1,000	.18	.16	2.2
Case-rate per 1,000	1.07	1.15	1.51
Case mortality per cent	17.5	14.3	14.3

The 40 cases notified were all treated at home. The Isolation Hospitals are not yet sufficiently well equipped to allow of the reception of Diphtheria cases. Perhaps of all the infectious diseases this is the one where isolation is least required, provided that antitoxin is promptly used. The Council have for many years past agreed to supply all the local practitioners in the District, free of cost, with serum for sub-cutaneous injection, both in curative and in prophylactic doses, granting at the same time a payment of 2/6 for the former, and 1/– for the latter cases. Swabs have been taken and submitted for bacteriological examination during the year.

With the exception of Shirebrook the disease never really became epidemic, but was fairly uniformly distributed throughout the whole District.

BLACKWELL.—Two cases occurred in one house at Westhouses, the first was reported in June, the second in August.

NORMANTON.—The three cases notified from this parish occurred in January, May, and June, and were located respectively as follows: Berrister-place, Carlin-lane, and Bailey's-yard. One of the cases terminated fatally.

PINXTON.—Five cases in different parts of the parish were recorded, two of which died. There was reason to suspect the spread of infection in one instance.

SHIREBROOK.—The disease was largely confined to children attending the infant department of the County Council Schools. 21 cases were notified occurring in 16 houses. These were fairly evenly distributed throughout the year. The only two months in which notifications were not received were August and October; the disease, therefore, never at any time became epidemic. The cases were indefinitely scattered throughout the parish, so that locality cannot be regarded as a factor in causing the spread of the disease. Large quantities of anti-toxin for prophylactic and curative purposes were supplied by the Council to the various local medical men.

SCARCLIFFE.—The eight cases appear to have been very irregularly distributed throughout the parish, and as far as one has been able to ascertain there was no connection between one case and another, except in one instance where man and wife were notified simultaneously.

AULT-HUCKNALL.—On June 20th a single case was notified in a girl aged 13 years, living in Doe Lea cottages.

TYPHOID FEVER.—

	1907.	1906.	Mean for 10 years, (1897—1906.)
Number of Cases	19	63	70
„ Deaths	1	6	5.6
Death-rate per 1,000	·026	·16	·18
Case-rate per 1,000	·51	1.7	2.3
Case mortality per cent	5.2	9.5	8.0

A perusal of the above figures is of special interest in showing what an important influence the weather has in causing the spread of this disease. It will be in the recollection of every one that the year was an essentially wet one: indeed there was no long continuance of fine weather during any part of the year.

It is now pretty generally accepted that the spread of Typhoid Fever is due in no small degree to the dissemination of infected dust arising from insanitary surroundings. There may be a few other factors at work, such for instance as the agency of flies, the consumption of infected shellfish, &c.

This disease never at any time during the year assumed an epidemic character, and the cases which did occur must have been very mild as indicated by the case-mortality per cent., which was a little more than half of that recorded for the previous year.

The cases were fairly evenly distributed throughout the whole of the year, and one of the characteristics of this disease, viz., autumnal prevalence, was entirely wanting. The majority of the cases were undoubtedly imported and retained a sporadic character.

Precautions taken to prevent the spread:—Eleven of the cases were removed to one of the Isolation Hospitals; of the eight cases not removed satisfactory grounds were obtained for not doing so. Special typhoid pails were supplied to each infected house, and the infested material removed each day by one of the Council's scavengers. Disinfectants were supplied, the drains thoroughly flushed and disinfected, all bedding submitted to high-pressure steam disinfection, and all rooms fumigated with the gas of formic aldehyde. The cost of isolation was approximately £28 12s.

NORMANTON.—During September two cases were recorded in Church-street.

PINXTON.—In this parish seven cases occurred in four houses, three cases were notified in one family, but the rest

were entirely of a sporadic character, occurring at long intervals and in different localities. One death took place.

SHIREBROOK.—Ever since Shirebrook became a place of importance it has, until the present year, been considered—as far as Typhoid Fever is concerned—one of the black spots of the District. It is very gratifying to be able to report that at last things have changed, and Shirebrook to-day can boast of having a record, when the size of the population is considered, equal to any and superior to most of the other contributory parishes of the District. The appended figures will be of interest when considering this disease :

	1907.	1906.	Mean of 10 years, 1897—1906.
Number of Cases	4	41	45·7
„ of Deaths	nil	4	2·7
Death-rate per 1,000	nil	·41	3·94
Case-rate „	·38	4·2	6·6
Case Mortality per cent.	nil	9·7	5·9

The four cases notified occurred at long intervals and were indiscriminately scattered throughout the parish.

PLEASLEY.—The two cases in this parish had no connection with each other, and were most probably imported.

SCARCLIFFE. None of the three cases recorded during the year occurred in Scarcliffe proper, but were distributed as follows, viz. : Bathurst-terrace, Hillstown and Palterton.

MEASLES.—This disease was very prevalent throughout the whole District during the year, causing no less than 40 deaths. Until this disease is made notifiable it is quite impossible to ascertain the actual number of cases. The various school authorities have been good enough to furnish me with data sufficient to prove that the outbreak was more than ordinarily severe. As is usually the case the disease was confined almost exclusively to young children attending the infant departments of the various schools.

At the request of the Local Government Board I made a special report on the epidemic, but it contained no fresh facts or anything specially interesting. Perhaps it may be advisable to draw your attention to the fact that a great deal of the time of the Inspectors was taken up in visiting the various houses, and giving verbal instructions to the parents, particularly with regard to the evils likely to arise from indiscriminate neighbouring.

Shirebrook and Pinxton were the two parishes most severely involved.

There appears to be little doubt that at the time of the outbreak there was a large unprotected population of young children.

WHOOPIING COUGH.—As far as the spread of this disease is concerned it may be considered to closely resemble measles, indeed they not infrequently occur together. It is a bad combination, particularly when it occurs in the cold winter months of the year: this leads to a high mortality, particularly in houses where comforts are not too plentiful, and where care and supervision are very indifferently carried out. It is in cases of this kind that the appointment of lady inspectors would prove of great value: they would be able to bring home to parents the necessity of observing certain details essential in the treatment of diseases of children.

From experience I am able to state that the paroxysms which occur in Whooping Cough not infrequently leave heart defects of a permanent character, hence another reason for the exertion of every possible means likely to favour the recovery from this malady.

SUMMER DIARRHŒA.—The prevalence of this disease, like Typhoid Fever, is considerably influenced by the rainfall. From observations made for a number of years past, there appears to be little reason to doubt that Summer Diarrhœa largely owes its spread to the diffusion of infected dust during the time of the year when

the ground temperature has reached its maximum height. If at that period the season chances to be a dry one, the contaminated dust readily finds its way to all kinds of food, particularly milk, which is left about the house all day in uncovered vessels.

When once the germ has gained access to milk it spreads with phenomenal rapidity, infecting the whole supply. During a wet year the dust is kept down and is less plentiful, hence it is less likely to prove harmful. The watering of streets and back yards in summer time is an advisable precaution, and need not involve very much cost or trouble. The paving of yards and open spaces adds considerably to the health of all dwellings, and it should never be allowed to get into bad repair.

The accumulation of refuse matter of every description should, whenever possible be prevented, as it forms a hotbed for the incubation of pathogenic germs.

Deposits of horse dung in the neighbourhood of dwellings afford a breeding ground for the common house fly, the eggs which have previously been deposited hatch, giving place to swarms of flies, each one of which takes the first opportunity of stretching out its filth-laden legs on the most readily available food, and by this means infects with living and poisonous organisms whatever it comes in contact with.

	1907.	1906.	Mean of 7 years. 1900—1906.
Number of Deaths	15	21	32
Death-rate per 1,000 births	10.8	16.2	24.7

It will be noticed on perusing the following returns that the year under consideration compares very favourably with its predecessors.

	1891	1892	1893	1894	1895	1896	1897	1898	1899	1900	1901	1902	1903	1904	1905	1906	1907
Blackwell	1	2	0	1	3	1	2	1	1	2	6	1	0	0	2	0	0
Normntn	6	3	3	5	5	7	1	7	5	2	8	3	3	3	5	1	0
Tibshelf	3	1	0	2	3	0	1	4	5	0	5	0	2	1	1	1	1
Pinxton	1	0	3	0	2	2	2	4	1	1	3	2	2	6	11	5	3
Pleasley	1	0	2	2	1	2	2	3	1	2	3	0	0	0	2	0	0
Shirebr'k	2	0	0	0	5	12	14	16	27	27	33	18	18	5	12	14	11
Scarliffe	1	3	6	1	3	2	0	4	3	4	8	2	2	0	0	0	0
Ault Huck	3	4	6	1	3	2	0	0	1	2	1	0	0	0	0	0	0
	18	13	20	12	25	28	22	39	44	40	67	26	27	15	33	21	15

* This does not include 1 at Upper Langwith.

Food and Diarrhœa.—From what I have just written it must be obvious that too much care cannot be taken in providing a pure milk supply for infants. Carelessness in this matter is only too frequently paid for by the death of a child.

Whenever possible the young infant should be kept at the mother's breast for at least five months, where the risks of food contamination are reduced to the lowest possible degree. When artificial feeding becomes necessary, certain precautions must be taken to render the substituted supply as near in quality to the mother's milk as possible.

Infants' food should be prepared as follows :

DIRECTIONS FOR PREPARATION OF INFANTS' FOOD.

<i>For a Child aged</i>	<i>Mix and then boil</i>	<i>For each meal</i>
Under 6 weeks	... { 1 part fresh milk 2 parts water 1 teaspoonful cream	{ 4 increasing to 6 tablespoonfuls
From 6 to 12 weeks old	{ 1 part fresh milk 1 part water 2 teaspoonfuls cream	{ 6 increasing to 8 tablespoonfuls
From 3 to 6 months old	{ 2 parts fresh milk 1 part water 2 or 3 teasp'nfuls cream	{ 12 to 16 tablespoonfuls

Table showing Vital and other Statistics during 1907, per 1,000 of Population.

Parish.	Area in Acres.	Population.	Average Persons per House.	Number of Inhabited Houses.	Birth-rate.	Death-rate.	Infantile Death-rate.	Zymotic Death-rate.	Respiratory Diseases.	Phthisis Death-rate.	Other Tuberculous Diseases.
Blackwell ...	1739	4516	5.3	852	31.2	11.9	99.2	1.9	1.3	—	.2
Normanton ...	1984	6177	5.2	1188	39.8	14.7	154.4	.31	4.2	1.3	.4
Pinxton ...	1253	4983	5.1	977	31.3	15.8	160.2	4.4	3.6	.6	.4
Tibshelf ...	2371	3906	5.3	737	37.3	14.9	143.8	1.28	3.8	1.2	.2
Shirebrook ...	1438	10449	5.8	1798	37.9	17.1	221.6	4.6	3.7	.8	.95
Scarliffe ...	3954	2707	5.1	531	53.9	18.1	102.7	1.9	4.4	.36	1.1
Ault Hucknall	4429	1840	5.6	329	27.7	19.5	217.7	.54	4.3	Nil.	1.6
Pleasley ...	1721	1791	5.4	326	37.9	8.9	58.8	Nil.	1.6	—	—
Langwith ...	1492	653	6.3	105	32.1	16.8	190.5	Nil.	4.5	—	—
Glapwell ...	774	111	6.1	18	36.	Nil.	Nil.	Nil.	—	—	—

SCHOOL HYGIENE.—The State, in adopting compulsory Education, has taken upon itself a responsibility of no little moment, especially with respect to the health of the vast majority of young children. The selection of teachers *naturally* fitted for the management and teaching of the young, is a point of great importance. It cannot be denied that most glaring faults have been committed in the past in the name of Education by the non-recognition of the part played by the physical in the cultivation of the mental. To make education a perfect success, it is necessary that the teacher should study the peculiarities of each scholar, and encourage their development on lines suited to their needs. As a rule, success and happiness in life depend more upon the development of the physical nature than upon the degree of mental culture. School is not only a preparation for life, it is a part of life itself, wherein body and mind are alike plastic, and capable of almost infinite development for good or ill.

My attention has recently been drawn to the want of supervision in heating some of the schools of this district. In some instances the temperature of the school-rooms in the early winter mornings is only slightly above freezing point ; whilst at other parts of the day the temperature is allowed to rise to a degree far above what may be fairly considered a healthy standard. These inequalities in temperature have a very prejudicial effect on the health of many young children, particularly of those of delicate constitutions.

The Bill passed for the inspection of school children is a step in the right direction, as it will have the effect of detecting early in life many abnormalities among children, particularly those of the working classes.

It is very advisable that the early recognition of these defects should be promptly followed by remedial measures.

TUBERCULOSIS.—From a public health point of view, the prevention of Tuberculosis is of greater importance than its cure. Municipal Authorities and the public generally are beginning to realise

that the cure of this disease is a little uncertain, and whenever fully accomplished, very costly. But neither of these facts is sufficient in itself to relieve Public Authorities of the responsibility of attempting to eradicate a disease, which makes its ravages felt in every grade of social life. How this problem can be best solved is exercising the attention of the finest minds of every civilised country in the world. Year by year fresh facts are brought to light, and new data of an experimental nature are being revealed, which go to indicate the lines on which treatment of this disease is most likely to be successful. Until quite recently, the presence of Tuberculosis in very young children has, in many instances, been overlooked, in some cases owing to the fact that the means of diagnosis now in use were not then readily available.

The importance of the early recognition and treatment of Tuberculosis during infant life, and subsequently during school life, is being realized by the rulers of our land.

This is clearly seen in the efforts which are being made to ascertain the causes affecting the high rate of infantile mortality in this country, and perhaps in a more marked degree in the recent measure which has been passed making the medical examination of school children compulsory. It is to be hoped that this Act of Parliament is only a prelude to other measures of a far more drastic character.

Tuberculosis in school children is a disease which is more common than is usually supposed. Those best able to judge know that a large proportion of children suffer constantly from sore throats, enlarged tonsils, and adenoid growths at the back of the nose. Conditions of this nature are a source of perpetual danger to the child, and ought not to be allowed to jeopardise its future welfare, when steps can be taken to remedy the defects. Every factor in a child's early life which affects its growth, or in any way retards its healthy development makes for Tuberculosis.

It must be obvious to any thoughtful person that one of the best means of eradicating Tuberculosis is to start at the beginning,

by affording such an environment for the child as will provide for its perfect growth and development, and at the same time making provision for the early correction of any adverse influences of either a congenital or an acquired kind.

SCAVENGING.—Below will be found a list of parishes in which public scavenging is carried out, together with the annual cost of the same, and the cost per house per annum.

Parish.	Contractor.	Cost per Year.			Cost per House per Annum.	
		£	s.	d.	s.	d.
Pinxton ...	A. Mott ...	266	2	0	5	6
S. Normanton ...	R. W. Lomas...	226	13	4	3	10½
Tibshelf (upper)	F. Clarke ...	215	0	0	}	8 8½
Tibshelf (lower)	F. Richards ...	105	10	0		
Pleasley ...	S. H. Downs...	130	0	0	7	7½
Shirebrook ...	H. Woods ...	695	0	0	8	7
Langwith ...	By Council ...	100	0	0		
(Emptying of Cesspools)						
Scarcliffe ...	By Council ...	10	0	0		
(Emptying of Cesspools)						

The above figures represent only a portion of the amount spent annually in scavenging the district. The Blackwell Colliery Co., the Sheepbridge Coal & Iron Co., and the Midland Railway Co. undertake the scavenging of their own houses, which number a total of something like 600.

In no part of the district is the work better done than by these owners. Putting this work down at a very low figure it cannot possibly be done for less than £150 per annum, indeed I am informed on the authority of those who undertake to do this work that the sum expended considerably exceeds that amount.

Numerous complaints have been received during the year regarding the very unsatisfactory manner in which the scavenger had been doing his work at Pinxton. After consideration, the Council took advantage of a clause in their agreement giving them

power to dispense with the services of the contractor, after serving a month's notice. Fresh tenders were advertised for in the local papers, and the contract let to Mr. A. Mott, at an annual payment of £266 2s 0d. The same condition of affairs took place at South Normanton, where it was found necessary to make some radical change. In this instance the Council thought it best to undertake the work themselves, and it is satisfactory to report that it is in every way proving a success, as the work is done much better and at practically the same cost. I am strongly of the opinion, and have been for some time past, that better results would be obtained throughout the whole of the district if the work were kept in the hands of the Council.

In the case of Upper Langwith it will be noticed that the sum of £100 is spent annually on the emptying of cesspools: this to my mind is a payment not producing results commensurate with such an expenditure.

The time is now ripe for considering the advisability of doing away with pail closets and privy middens, particularly as the Council no longer make a charge for water supplied to w.c.'s. The slight extra cost incurred in the erection of these structures is so small that it no longer becomes a hardship on the builders of cottage property. Financially considered it must be an advantage by reducing the amount of money spent annually on public scavenging. There is a good deal of evidence to show that the incidence of Typhoid Fever and Summer Diarrhœa is less on dwellings provided with water closets than it is on houses supplied with middens or pail closets.

SEWERAGE AND SEWAGE DISPOSAL.—A good deal of experimental work has recently been carried out with the object of ascertaining the most suitable depths for percolating filters. It is not so many years ago that a depth of 6 or 7 feet was considered advisable, but recent experiments have shown that the greater portion of the purification really takes place in the first 4 feet, so that the expense

involved in the construction of deep filters may practically be dispensed with—the area rather than the depth should be the object aimed at.

A considerable amount of important work has been done in this district during the year. With the object of showing what has actually been accomplished, I purpose treating each parish separately.

BLACKWELL.—OUT-FALL WORKS—

- (a) Primrose Hill.
- (b) Newton Green.
- (c) West Houses (*a*).
- (d) West Houses (*b*).

(*a*) These works were completed in 1906, and have been in satisfactory working order ever since, as shewn by the quality of the effluent.

(*b*) It will be recollected that on November 21st a joint report on these works was submitted to the Council by Mr. Silcock, Surveyor, and the Medical Officer of Health, which ran as follows :

“ Acting on your instructions of the 24th ult. to enquire into the County Council’s complaint of the 3rd October last, we find that the ditch on the North-west side of the sewage disposal area is in all probability at times being polluted by sewage not fully treated, and we think you would be well advised in executing the following work :—

- (a) To distribute the tank effluent by means of 4" pipes over the existing ashes-tip as has been done at Tibshelf with good results.
- (b) Construct an ashes bed of suitable material alongside the brook. This bed would, in our opinion intercept and complete the work of purifying any sewage which escaped in time of flood from being fully treated by the method (*a*).

We are further of an opinion that a small effluent collecting chamber should be built at the existing outlet into the brook as suggested by the County Authority.

(c & d) It is very unfortunate that the Council has to provide no less than four outfall works in this parish. This is partially due to the fact that the levels are very adverse; the other factor being that the houses are not placed in one neighbourhood, but distributed in small colonies in different parts of the parish.

The two out-fall works at Westhouses, marked c and d, amply illustrate this fact, as they are not more than half-a-mile apart. They require for their completion the addition of filter beds and sprinklers, and as the revolving arm appears to give the best results, that means of distribution might be adopted.

PINXTON.—OUT-FALL WORKS—

- (a) Main Works.
- (b) Pinxton Green.
- (c) Brookhill Lane.
- (d) Old Out-fall Works.

(a) The works are now fulfilling the object for which they were first constructed, but that end has not been attained without considerable modification in numerous particulars. The septic tanks have been considerably reduced in size, the pump-well has been filled up with a coarse material converting it into a coarse filter, and the sewage, instead of being delivered through an iron pipe, is now made to pass through a revolving arm giving an intermittent discharge. By these means the over-septicity which was at the root of the evil has been remedied.

Well washed granite screenings have been substituted for the original fine limestone of the filter bed.

The original small detritus tank has been replaced by an entirely new one of much greater dimensions. A new diaphragm pump has been provided for the purpose of removing silt and other insoluble matter from the septic tanks and the detritus tank. The pumping capacity of the engine has been reduced so that it is no longer possible to empty the sewage from the septic tanks until more time has been allowed to elapse for the necessary changes to take place.

The whole of this work has been carried out at a cost of £327.

- (b) A new scheme, at an estimated cost of £460, has been sanctioned for the drainage of that part of the parish known as Pinxton Green, which could not be dealt with at the main out-fall works. It is proposed to provide a circular septic tank, two percolating filters provided with revolving arms, and a storm filter and the necessary sewers from the neighbourhood of the Rectory to the out-fall works.
- (c) The small installation in Brookhill Lane is giving satisfactory results.
- (d) A portion of the old outfall works is being used for the treatment of storm water only, which is delivered on to a very extensive heap of ashes. As these works command the whole of Upper Pinxton it might be found necessary during a temporary break-down at the main outfall works to deal with the whole of the sewage of that area.

PLEASLEY—

For a considerable time past efforts have been made for effectually dealing with the Sewage of this parish, and several schemes have been prepared and abandoned.

A scheme has been designed by Messrs. Vallance & Westwick for dealing with three times the dry weather flow, i.e. 66,000 gallons per day of twenty-four hours as sewage proper, and a further 66,000 gallons as storm water.

The dry weather flow from New Houghton is fixed at 20,000 gallons per day and is to be treated upon land to be acquired between the Midland and Great Northern Railways, and known as the "High Level Site." The storm water from this district (60,000 gallons), the dry weather flow of sewage from Pleasley (2,000 gallons), and also the storm water from this district (6,000 gallons) are to be treated upon part of the existing works, hereafter referred to as the "Low Level Site."

HIGH LEVEL WORKS.—It is proposed to intercept the sewage from New Houghton near the subway under the Midland Railway at manhole No. 1, and convey it by 9 in. cast-iron pipes on brick piers to screening chambers and settling tanks, from which it will flow on the percolating filters, over which it will be distributed by revolving sprinklers.

Around the bottom of filters will be formed channels, into which effluent will flow, and from there be carried down to the Low Level Site by a 9 in. pipe sewer, and finally discharge into the river Meden.

SETTLING TANKS.—The Settling Tanks will be in duplicate, and together hold one day's dry weather flow—20,000 galls.

The size of each tank is 27 feet in length, 10 feet in width, and 6 feet deep, giving a capacity of 10,000 gallons.

These tanks will be constructed of Portland cement concrete, and fitted with arrangements for drawing off the sludge, and floating arms for drawing off the liquid sewage when necessary to clean them out, and discharging it by means of a 6 in. pipe connected to manhole No. 3 on to the storm bed on the Low Level Site, so that it may be filtered before passing into the river.

PERCOLATING FILTERS.—The two circular Percolating Filters are each 46 ft. in diameter and 6 ft. in depth, and together

are designed to deal with three times the dry weather flow (60,000 gallons) at the rate of twenty-eight gallons per square yard, 1 foot in thickness, every twenty-four hours.

The floors under these filters will be formed of cement concrete, 6 in. thick, upon which will be laid 4 in. aerating tiles to receive the filtering medium.

The filtering medium will also be ventilated by means of two rows of agricultural pipes laid horizontally.

Arrangement has been made for the erection of a third filter on this site when required.

The sewage from New Houghton in excess of three times the dry weather flow will pass over the weir in No. 1 manhole, down the existing 9 in. sewer to manhole No. 6 on the Low Level Site, and thence to the storm beds; any excess over six times the dry weather flow will escape over the weir in this manhole and discharge into the stream direct.

LOW LEVEL SITE.—The bed for treating the storm water is arranged on the Low Level Site, and is 34 ft. 6 in. \times 34 ft. 6 in. \times 3 ft. in depth.

This bed is designed to deal not only with the 60,000 gallons of storm water from New Houghton, but also with the 6,000 gallons of storm water from Pleasley.

The storm water is distributed over this bed by means of half-round pipes, and the bed is capable of dealing with 500 gallons per square yard in twenty-four hours.

The existing outfall sewer from Pleasley Hill will be intercepted at manhole No. 9, and at manhole No. 8 three times the dry weather flow of sewage will pass through a screening chamber to the settling tanks, and from thence to a percolating filter.

The settling tanks are constructed in duplicate, and together hold one and a half day's dry weather flow. The size of each tank is 15 feet in length, 4 feet wide, and 4 feet deep, and its capacity 1,500 gallons.

These tanks are larger in proportion than the settling tanks on the High Level Site, because if only made to hold one day's supply they would be too short to give good results.

The percolating filter will be 34 ft. 6 in. long, 19 ft. 6 in. wide, and 3 ft. in depth, and is designed to deal with 6,000 gallons in twenty-four hours, at the rate of 28 gallons per square yard per foot in thickness.

The floor of the filter will be formed of Portland cement concrete 6 in. thick, laid to falls to the channel around the outside of filter to receive the effluent, which will be conveyed therefrom into the river.

The sewage will be distributed over the filtering medium by half-round pipes.

At manhole No. 8, the sewage above three times the dry weather flow will pass to No. 7 manhole, and all from three to six times the dry weather flow will pass on to the storm bed, and all above six times the dry weather flow will pass from No. 7 manhole to manhole No. 6, where it will join the 9 in. effluent sewer and be discharged into the river.

It is proposed to dispense with both the existing Cosham tanks.

There is room for further extension also on this site.

The estimated cost of the work is £2,450.

TIBSHELF.—For a considerable time past a good deal of inconvenience has been experienced in the neighbourhood of St. Thomas' Row through the imperfect drainage of the surface water. A scheme has been sanctioned for remedying this defect at a cost of £34.

BABBINGTON STREET: A new 9" sewer has been constructed at a cost of £62.

HARDWICK STREET: A new 6" extension sewer has been laid at a cost of £8.

SOUTH NORMANTON.—OUT-FALL WORKS.—

(a) Main Works.

(b) Birchwood Lane.

The time has now arrived for the completion of the present out-fall works.

For a number of years past slight additions and alterations have been made at these works, but at the present time they are only capable of dealing with a little more than half the dry weather flow. It should be pointed out that the Local Government Board requirements are that sufficient tank and filtering area be provided for dealing with not less than twice the dry weather flow, in addition to suitable facilities amounting to four times the dry weather flow for the treatment of storm water, thus equalling in all six times the dry weather flow. Beyond that amount no provision is necessary.

For the completion of these works the following are the requirements needed :

- (a) The provision of revolving arms on the existing primary beds.
- (b) The construction of new secondary beds, furnished either with revolving arms, or similar sprinklers to those now in use.
- (c) Increased capacity of present storm beds.

(d) The filling up of the old sludge lagoons.

I beg strongly to urge that this work be carried out without further delay, as it will have the effect of relieving the Council of the responsibility of polluting the stream.

Entirely new works have been constructed in Birchwood-lane for the treatment of sewage in that locality, consisting of a circular septic tank, two rectangular percolating filters, furnished with automatic distributors, and a storm water bed at a cost of £470 ; in addition, 600 yards of new sewers have been laid.

LEES LANE.—A new sewer has been laid to replace an old and defective one at a cost of £114.

SHIREBROOK.—The completion of the out-fall works in this parish has remained in abeyance pending a settlement of the Langwith Junction sewage question.

The area for sewage disposal, now in the possession of the Council, is sufficiently advantageous and extensive to enable them to cope with practically any volume ever likely to be necessary.

What is now wanted to render the works adequate for all prospective demands is the construction of new percolating beds. This work need not be an expensive one.

It should be pointed out that no matter how well the beds are constructed, unless the distribution of the sewage is carefully provided for, the effluent cannot possibly attain a high standard of purity.

SURFACE DRAINAGE. During the year 1907 a surface drain made up of 15", 12", 9" and 6" pipes, 216 yards in length, was laid in the lowest parts of this parish at a cost of £30. This work was carried out under the supervision of the Surveyor to the Council, and should prove of inestimable value to the area served.

Further extension of this kind of work is badly needed before all the low-lying parts of the parish may be considered properly drained.

SCARCLIFFE.—In the October estimates provision was made for the construction of a new sludge lagoon.

UPPER LANGWITH.—LANGWITH JUNCTION. Several meetings were held during the year for the distinct purpose of considering the best means of dealing with the sewage disposal of this extremely difficult section of the District. It was finally decided to ask Mr. Frank Cook, A.M.I.C.E., of Mansfield, to advise the Council as to the most economical method of carrying out the work.

The Engineer having inspected Upper Langwith district reported to the Council as follows, viz. : “ That he had considered the whole question as regards gravitation, works, and pumping, and that he was strongly of opinion, having regard to cost and also to efficiency, that the scheme best suited to the needs of the locality was the connecting of new sewers to be laid throughout the Upper Langwith area to the existing sewerage scheme in operation at Shirebrook, the adjoining parish, if suitable terms could be arranged between the two parishes.

By adopting such an arrangement the necessity of laying down out-fall works, involving a continual outlay for wages and upkeep would be obviated ; and, beyond new sewers for streets which might possibly be laid down later in the district, no extra expenditure would be incurred.”

A scheme was considered for taking the sewage to the low-lying ground below Stubbins’ Wood, but on account of there being no outlet for effluent the Engineer advised that the scheme be abandoned.

The Engineer reported to the Committee that he had also considered if the sewage could be dealt with by pumping ; but in this case several difficulties presented themselves, principally as regarded the acquirement of a suitable site, which could not be obtained within the area affected, and also on account of the greatly increased annual cost of such scheme which would be incurred for laying down the works, and upon their upkeep when constructed.

WATER SUPPLY.—As usual, chemical analyses of the various supplies of the District have been made during the year, and in every instance the water was found free from signs of pollution. The amount of water consumed in the undermentioned parishes, as indicated by meter reading was as follows, viz. :—

BLACKWELL.—

	1907.	1906.
1st Quarter ...	3,609,000	2,904,000
2nd „ ...	3,619,000	3,410,000
3rd „ ...	4,173,000	3,686,000
4th „ ...	3,703,000	3,265,000
Total gallons	15,104,000	13,265,000

SOUTH NORMANTON.—

	1907.	1906.
1st Quarter ...	5,011,000	4,877,000
2nd „ ...	4,744,000	5,186,000
3rd „ ...	4,880,000	4,949,000
4th „ ...	5,222,000	4,607,000
Total gallons	19,857,000	19,619,000

PINXTON.—

	1907.	1906.
1st Quarter ...	2,243,000	
2nd „ ...	884,000	
3rd „ ...	968,000	
4th „ ...	716,000	
Total gallons	4,811,000	

TIBSHELF.—

	1907.	1906.
1st Quarter ...	3,139,000	4,052,000
2nd „ ...	3,306,000	3,439,000
3rd „ ...	3,428,000	3,460,000
4th „ ...	3,060,000	3,229,000
Total gallons	12,933,000	14,180,000

SHIREBROOK.—

		1907.	1906.
1st Quarter	...	8,420,000	8,715,000
2nd „	...	9,093,000	10,045,000
3rd „	...	9,963,000	9,790,000
4th „	...	8,976,000	7,315,000
Total gallons		36,452,000	35,865,000

PLEASLEY.—

		1907.	1906.
1st Quarter	...	2,109,000	2,063,000
2nd „	...	1,769,000	2,329,000
3rd „	...	1,992,000	2,365,000
4th „	...	1,717,000	2,415,000
Total gallons		7,587,000	9,172,000

It will be recollected that in August the Surveyor presented to the Council a detailed and carefully prepared report regarding the advisability of obtaining water from the Derwent Valley supply. The report contains information of such a valuable character that I have decided, with the permission of Mr. Silcock, to insert the report in its entirety.

TO THE BLACKWELL RURAL DISTRICT COUNCIL.

Gentlemen,

DERWENT VALLEY WATER.

Acting on your instructions contained in the minute of June 6th, 1907, I have made preliminary surveys and carefully considered the question of the possibility of supplying the District with water from this source.

It will be within the recollection of some members that in June, 1902, I submitted a report as to a suggested water scheme for the whole of the District urging, in view of the facts that such places as

Sutton, Kirkby, Selston, and Mansfield could profitably supply their own areas and sell to other Local Authorities, it would be worth your best consideration to obtain expert advice as to whether you could not, with equal advantage supply water at first cost to your District.

The Derwent Valley Scheme was at that time in process of formation, and it was deemed prudent to defer the consideration of the particular needs of this District pending its completion.

At the outset I would draw your attention to the purity and softness of the Derwent Valley water, and its equal suitability for domestic and trade purposes owing to its containing but 2 degrees of hardness, as contrasted with 8 to 32 degrees in water derived from the Bunter and Limestone formations.

The following is the analysis in parts per 100,000 :

Total Solids	...	5·0	Total Hardness	...	2·0
Free Ammonia	...	·002	Chlorine	...	1·0
Albuminoid Ammonia		·005	Nitrogen as Nitrates		Nil.

I understand that you are entitled to take 15 gallons per head per day which, seeing that the present consumption throughout the District averages about 10 gallons, allows for an increase of 50 per cent., therefore the possibilities of a famine at this source are very remote. These are important matters for consideration when it is a known fact that the Bunter Beds are slowly but surely being exhausted, and the demand of growing populations is becoming a serious problem to Authorities bordering on the East of the District.

At the present time Mansfield is going further afield at a cost of some £40,000, and the reports of the public press inform us that the water in the wells of Local Authorities in the immediate vicinity lowers every year, and fails to rise to the former levels when the pumps are at rest. In view of this it is only reasonable to anticipate that on the expiration of the existing contracts the already high rates charged by Local Authorities for supplies in bulk to this Dis-

trict would be further increased, if indeed, they would be prepared to renew same at all. An instance of this may be given in the case of Mansfield's charges, viz. : Tibshelf 9d., but for the new undertaking at Pleasley, 11d.

It seems to me that the Parishes which could be first and best supplied by the proposed scheme are Blackwell, South Normanton, Pinxton, Tibshelf, and Pleasley. Of course, the water would be available for any other portion of the District, if required.

The nearest point of supply is from a service reservoir now in course of construction at Fritchley, near Ambergate, the floor level of which is 617, Ordnance Datum. This is the first of three service reservoirs which will cover about 40 acres. They will be entirely underground, and, I believe, are designed to store a flow of 33,000,000 gallons per day from vast impounding reservoirs on the highest reaches of the Derwent, and I am informed that probably 11,000,000 gallons per day will be available early in 1910,

Assuming you take a supply, I have estimated for a 12-inch main passing through certain private lands, over County and District highways, proceeding in a North-easterly direction from Fritchley via Oakerthorpe, over Ufton Fields, North of Alfreton, and through Westhouses, ending at the "George and Dragon" Inn, Newton. This arrangement lends itself to connecting up the existing mains in the South-west section of your District at convenient points.

Several miles of existing defective mains in Blackwell including the greater portion of the joint 6-inch main, which is the property of Blackwell and South Normanton, would be dispensed with. Tibshelf would be served by the existing main from Newton up to a point where water ceases to flow by gravitation until it was found necessary to link up the North-east portion of the District, in which case pumping on a small scale would have to be resorted to before water could be passed on to Pleasley. As to Pinxton, it would be

necessary to connect up to the South Normanton mains at the top of Storth-lane or some other convenient place.

The estimated cost of the mains, which would be about eight miles long, including "Venturi" Meter, self-acting and other shut-off valves, all special fittings, compensation to land owners and occupiers, making good County and District roads, crossing six railways and 5 water courses and rivers, together with contingent expenses, Clerk of Works and Engineer's fees, is £8,750.

As to compensations, all the owners have stated in writing that they have no objection to the scheme, and, providing their claims are fairly reasonable, I consider this figure an ample estimate.

The repayment of Principal and Interest extending over a period of 30 years at the higher rate of 4% interest (and probably you need not pay more than $3\frac{3}{4}\%$) would amount to £506. This, together with the further annual charge of £100 which I estimate for maintenance, makes a total of £606 per year to be provided by those Parishes served.

Before the net gain can be correctly ascertained it is necessary to know what the charges per 1,000 gallons in bulk will be, and as yet the Derwent Valley Water Board are not in a position to name a definite sum. However, I have it from an official source that the charges will not be less than $5\frac{1}{2}$ d. and not more than $7\frac{1}{2}$ d. per 1,000 gallons, therefore, for the purpose of this report, I have taken an average of $6\frac{1}{2}$ d. which I think is a safe and reasonable basis to work upon.

Taking last year's consumption (which was not excessive) in those Parishes most interested at present in this scheme, the following comparative statement shows the estimated savings which would be effected on the present rates paid for water as against annual charge created by the cost of the new works.

Particulars of Estimated Saving upon the existing Scale of Charges per year, based on the water consumption for year ending December, 1906, together with particulars of repayment of the charges for New Main.

Parishes.	Consumption.	Saving per 1,000 Galls.	Total Saving			Repayment of Principal, Interest, and Maintenance of 12" main.		
		d.	£	s.	d.	£	s.	d.
Blackwell ...	13,000,000	3½	189	11	8	127	1	3
Pinxton ...	6,000,000	2½	62	10	0	58	13	0
Pleasley ...	9,000,000	4½	168	15	0	87	19	4
South Normanton	20,000,000	3½	291	13	4	195	9	7
Tibshelf ...	14,000,000	2½	145	16	8	136	16	10
			858	6	8	606	0	0

There would be certain minor charges to each Parish for connecting up to the new main which could be included in the loan.

It should be borne in mind that as the population increases and water is taken for trade purposes, the consumption and gain would be proportionately greater. If the Derwent Valley Water Board are fortunate in completing the works within the estimate (and I am informed they are likely to do so by £500,000) it is just possible that the charge per 1,000 gallons for water would not exceed 6d., in which case the Parishes taking water from this source would obviously further benefit.

It would perhaps not be out of place to shew that the Derwent supply from Fritchley is much nearer the centre of the District than the wells from which water is now taken. For instance, when water is taken from Mansfield Clipstone well it will have to traverse a distance of 15½ miles and be pumped twice; and in the case of Sutton the distance is 9 miles and is also pumped twice, whereas the water from the proposed supply would flow by gravitation to within a few feet of the highest point in the District.

There now remains the difficult question as to whether the various Authorities now supplying water would be willing to terminate the existing agreements before the dates of expiration given on page 57 of the Year Book. However, in any case, the Council could

take a supply equal to the minimum rental until such times as the said agreements one by one expired.

Unfortunately, we have not been able to have a meeting with the Alfreton Urban District Council with a view to discussing the advisability of affording them an auxiliary supply of water, which could very conveniently be given from this Scheme. Any receipts from Alfreton, or the Midland Railway Company for their engines at Westhouses would, of course, go further in relief of the charges set forth in the comparative statement given before in this report.

I am, Gentlemen,

Your obedient Servant,

HENRY SILCOCK,

District Surveyor.

Mansfield,

Aug. 1st, 1907.

Table showing in detail Houses Supplied by Public Service.

Name of Parish.	No. of Houses.	Per centage supplied.	Gals. $\frac{1}{2}$ House per day	Gals. $\frac{1}{2}$ head per day	Source of Supply.
Ault Hucknall	329	62	Unlimited.	Unlimited.	Sheepbridge Coal & Iron Co.
Blackwell ...	852	94	53	10	{ Sutton Urban Council & Mansfield Corporation
Glapwell ...	18	0	0	0	
Pinxton ...	977	91	35	7	Basford R. D. Council.
Pleasley ...	326	97	76	14	{ Mansfield Corporation, The Duke of Devonshire, and Mr. Verney's supply.
Shirebrook ..	1798	96	61	10	
Scarliffe ...	531	55	Un-known.	Un-known.	The Bolsover Water Co.
S. Normanton	1188	97	47	9	Pinxton Urban Council.
Tibshelf ...	737	99	48	9.3	Mansfield Corporation.
U. Langwith	105	67	Un-limited.	Un-limited.	{ Duke of Devonshire and Mr. Birkitt's (Polterwell).

DISINFECTION.—Since the appointment of an additional Inspector of Nuisances, the work of the District has been equally divided, each Inspector having his own allotted area. The population of the District has reached a point when it is no longer possible to disinfect all that is needed with one steam disinfecter.

The cost incurred in moving this apparatus from one side of the District to the other amounts to thirty shillings, and involves a considerable loss of valuable time. I am of opinion that the time has now arrived for taking into consideration the advisability of procuring an additional steam disinfecter.

Altogether 235 houses have been disinfected during the year with the vapour of formaldehyde. In all cases of Typhoid Fever the drains have been flushed and disinfected with Izal, and liquid Formaline. Strict instructions have been given to the scavengers to thoroughly disinfect pails, ashpits, and privy middens with Izal powder, as a part of their routine work; the disinfectant being plentifully supplied free of cost.

BACK YARDS.—I am pleased to be able to report that the special attention given by the Inspectors of Nuisances to the paving and improvement of the sanitary condition of the back yards of the District under Bye-law 60 has been well rewarded.

While considering the matter, I beg respectfully to draw the Council's attention to the condition of the large open space between Victoria-street and Market-street, Shirebrook. At present it forms the play-ground for a large number of children, and is a magnificent open space, which only requires to be well drained and asphalted to make it a splendid breathing ground for a thickly populated area. As it now exists, during a great part of the year, it is little better than a swamp, harbouring filth and refuse of all kinds.

FACTORIES AND WORKSHOPS.—The only two factories in the District are situated in Pleasley Vale, and are owned by Messrs. Hollins and Co., Ltd.

Seven new workshops have been added to those already on the register, the number being 160. Notice to limewash has been given to the occupier in one instance, and to repair drains in three other cases.

The following is a list of the workshops found in each parish of the District, and classified according to the various trades:—

	Ault Hucknall	Blackwell	Glapwell	Pinxton	Pleasley	Shirebrook	Seacroft	S. Normanton	U. Langwith	Tibshelf	Total
Aerated Waters	1	..	..	..	..	1
Bakehouses	1	..	3	..	4	1	2	11
Boot Repairing	2	..	4	1	8	3	3	..	3	24
Blacksmith	1	1	3	1	1	2	2	..	1	13
Brick Making	1	..	..	..	1	..	3	..	..	5
Cycle Repairing	1	..	4	..	1	..	1	7
Dressmaking	1	..	4	2	14	2	2	..	11	36
Engine Cleaning	1	..	..	..	..	..	..	1	..	2
Gas Works	1	1	1	1	1	..	..	..	1	6
Hosiery Finishing	2	..	2	4
Joinery	1	..	2	..	3	1	3	..	2	12
Millinery	2	..	7	1	4	..	4	18
Malting	1	..	1
Printing	1	..	1	..	1	..	..	3
Saddlery	2	..	1	..	..	3
Saw Milling	1	1	3	1	1	1	1	..	2	11
Tailoring	1	..	1	..	..	2
Waggon Repairing	1	..	1
	5	7	1	22	6	48	10	28	4	29	160

Annual Report of the Medical Officer of Health for the year 1907.
for the Blackwell Rural District Council, on the administration
of the Factory and Workshop Act, 1901, in connection with
FACTORIES, WORKSHOPS, LAUNDRIES, WORKPLACES,
AND HOME-WORK.

I.—INSPECTION.

	Inspec- tions.	Written Notices.	Prose- cutions.
Factories (including Factory Laundries) ...	5	0	0
Workshops (including Workshop Laundries) ...	341	3	0
Workplaces (other than out-workers' premises) included in Part III. of this Report ...	60	0	0

II.—DEFECTS.

Nuisances under the Public Health Acts—

	Found.	Reme- died.
Want of Cleanliness	1	1
Other Nuisances	2	2

III.—HOME WORK.

Outworkers' Lists, Section 107—

	Lists.	Out- workers
Lace, lace curtains and nets—		
Lists received from employers twice in the year	6	8
Ditto ditto once in the year	3	3
Number of Addresses of Outworkers received from other Councils		8
Number of Inspections of Outworkers' Premises ...		60
Outwork in Unwholesome Premises, Section 108—		
Notices served		0
Outwork in Infected Premises, Sections 109, 110—		
Instances		0
Orders made (Sec. 110)		0

IV.—REGISTERED WORKSHOPS.

Bakehouses	...	...	...	...	...	...	11
Boot Repairing...	...	...	...	...	...	...	24
Dressmaking	...	...	...	...	...	...	36
Millinery	...	...	...	...	...	...	18
Others	...	...	...	...	...	...	28
Workplaces	...	..	...	...	...	...	43
Total number of Workshops on Register							160

JOHN O. LITTLEWOOD,

Medical Officer of Health.

31st December, 1907.

SLAUGHTER HOUSES.—The Council have during the year adopted the Model Bye-laws of the Local Government Board with respect to slaughter houses, which have not yet been put into force, as they are still waiting the sanction of the L. G. B.

The number of slaughter houses in the District is 32, not one of which is either officially licensed or registered. They have all been periodically inspected during the year, and in numerous instances the Inspectors have had to serve notices requiring the cleansing of premises, lime washing, and the removal of refuse.

The adoption of bye-laws will be instrumental in compelling the occupiers of these premises to remove all refuse and other excreta within 24 hours after killing, and at the same time compel them to thoroughly cleanse and wash down all floors and walls that have become fouled during the act of slaughtering.

BAKEHOUSES.—One new bakehouse has been opened in the District during the year, bringing up the total to eleven. Eighty-two inspections have been made during the year, and 6 notices served requiring lime-washing and improved drainage.

OFFENSIVE TRADES.—There are three tripe-boilers registered in the District under this heading. Thirty-three inspections have been made and three notices served during the year.

COWSHEDS, DAIRIES, AND MILK SHOPS.—There were 166 cowsheds, dairies, and purveyors of milk registered in the District during the year.

A considerable amount of time is now taken up by the Inspectors in visiting these places. During the year 462 inspections were made, and 25 notices were served to cleanse and limewash.

The microscopical examination of milk shows that even the best samples contain foreign matter of various kinds, whilst some of the dirty class are impregnated with considerable quantities of fæcal matter, hair, epithelial cells, straw, vegetable debris, dust particles, and bacteria. Other substances such as, for instance, pus cells, red blood discs, the bacilli of tubercle and diphtheria are occasionally present.

It is high time that the purveyors of milk were brought to book for distributing a requirement of life fraught with so many risks and dangers to the consumer. Until these milk sellers are made to feel their responsibility by means of a well-supported prosecution, there is little hope of much improvement being made in this direction.

The amendment of the Orders of 1885 and 1886 has been under the consideration of the Council during the year, and it has been practically decided to amend the old Orders early in the coming year.

ISOLATION HOSPITALS.—There are three hospitals available for the isolation of patients from this District, viz., Morton, Hasland and Mastin Moor. Plans and specifications for the construction of a new hospital at Upper Langwith have been prepared, and the contract let. There is every reason to believe that everything will be in order for the reception of patients early in 1908. The number of cases submitted for isolation during the year was 115, consisting of 104 cases of scarlet fever, and 11 of typhoid fever. The cost involved in the treatment of these cases was £570 6s., which works out at £4 19s. 3d. per case; this amount includes the necessary expenses incurred in removal, etc.

ANNUAL REPORT OF SANITARY INSPECTOR.

BLACKWELL (SOUTHERN) SANITARY DISTRICT.

Name of Inspector, S. WILMOT, Cert. R. San. I.

Area of District 7,297. Estimated No. of Houses 3,900. New Houses erected 1907, 29

	Informal Notices Served by Sanitary Inspector.	Legal Notices Served by Local Authority.	Nuisances Abated.
DWELLING HOUSES—			
Repaired	87	6	87
Closed as Unfit for Habitation ..	—	—	—
Infected Houses Disinfected ..	168	—	—
DRAINAGE—			
No Disconnection of Waste Pipe ..	10	1	10
Defective Traps, Inlets, and Drains	111	14	160
Drains Obstructed	56	11	56
CLOSETS AND ASHPITS—			
Insanitary Privies and Ashpits ..	116	7	244
Insufficient Closet Accommodation	27	—	27
Conversion of Privies into W.C.'s	32		
Defective Water Closets	8	—	8
OTHER DEFECTS—			
Surfaces of Courts and Yards ..	58	—	120
Eaves-Spouts and Down-Spouts ..	84	—	316
Urinals Defective	4	—	4
Water Supply	5	6	5
Offensive Accumulations	283	1	978
Animals Improperly Kept	53	5	53
Pigsties	17	2	17
Smoke Nuisances	3	—	3
Overcrowding	8	2	7
Foul Condition of Houses	9	1	9
Totals ..	1057	56	2104
	Number on Register.	Inspections Made.	Notices Served.
Dairies, Cowsheds, and Milkshops ..	83	291	11
Bakehouses	7	56	4
Slaughterhouses	20	420	5
Offensive Trades	—	—	—
Common Lodging-houses	—	—	—
Totals ..	110	767	20

Action taken by Inspector against spread of Infectious Disease— } 88 Patients removed to Hospital,
 Samples of Water submitted for Analysis— 6 } Houses disinfected with Formalin.

Other Action taken— 4 Wells closed and Public Service put in.

Signed, S. WILMOT, R. San. I.

ANNUAL REPORT OF SANITARY INSPECTOR.

BLACKWELL (NORTHERN) SANITARY DISTRICT.

Name of Inspector, WILLIAM HILL.

Area of District 13,808.

Estimated No. of Houses 3,107.

New Houses erected 1907, 133.

	Informal Notices Served by Sanitary Inspector.	Legal Notices Served by Local Authority.	Nuisances Abated.
DWELLING HOUSES—			
Repaired	8	—	8
Closed as Unfit for Habitation ..	—	—	—
Infected Houses Disinfected ..	67	—	—
DRAINAGE—			
No Disconnection of Waste Pipe ..	—	—	—
Defective Traps, Inlets, and Drains	39	7	35
Drains Obstructed	72	3	72
CLOSETS AND ASHPITS—			
Insanitary Privies and Ashpits ..	106	18	106
Insufficient Closet Accommodation	16	8	16
Conversion of Privies into W.C.'s	7	—	7
Defective Water Closets	2	2	2
OTHER DEFECTS—			
Surfaces of Courts and Yards ..	113	—	113
Eaves-Spouts and Down-Spouts ..	14	—	13
Urinals Defective	2	—	2
Water Supply	5	5	5
Offensive Accumulations	109	—	109
Animals Improperly Kept	27	5	27
Pigsties	14	3	10
Smoke Nuisances	—	—	—
Overcrowding	3	3	3
Foul Condition of Houses	3	3	3
Totals ..	607	57	531
	Number on Register.	Inspections Made.	Notices Served.
Dairies, Cowsheds, and Milkshops ..	83	172	14
Bakehouses	4	26	2
Slaughterhouses	12	107	5
Offensive Trades	3	33	3
Common Lodging-houses	—	—	—
Totals ..	102	338	24

Action taken by Inspector against spread of Infectious Disease— } 27 Patients removed to Hospital,
 Rooms fumigated with Formaldehyde
 Bedding of Typhoid cases steam disinfected.

Other Action taken—Weekly Inspection of Market at Shirebrook.

Signed, WILLIAM HILL.

MANSFIELD METEOROLOGICAL REPORT FOR THE YEAR 1907.

I am indebted to MR. PHILIP J. SHACKLOCK, Chemist, of Mansfield, for the following particulars :—

RAINFALL.

Total Depth.				Greatest Fall in 24 Hours.			Number of Days with .01 or more Recorded.	
				Depth.	Date.			
Jan.	...	1.15	...	.32	...	2	...	12
Feb.	...	3.07	...	.56	...	11	...	16
March	...	.60	...	.42	...	4	...	9
April	...	2.52	...	.39	...	10	...	20
May	...	4.31	...	1.18	...	31	..	20
June	...	4.22	...	.61	...	10	...	22
July	...	2.84	...	.46	...	21	...	20
August	...	2.65	...	1.19	...	14	...	17
Sept.	...	.77	...	.25	...	2	...	11
Oct.	...	6.60	...	1.76	...	16	...	25
Nov.	...	2.37	...	.54	...	21	...	20
Dec	...	3.02	...	.63	...	14	...	18
<hr/>						<hr/>		
34 12								210

Yearly Average 30.68 inches.

SUMMARY.

JANUARY.—Rainfall an inch and a quarter below the average. Average maximum temperature, 41.4 (above average). Mean temperature, 36.0. Mild the first three weeks, cold and frosty last week. Generally mild and dry, and fair amount of sunshine. Winds, W. and N. N.W. predominated.

FEBRUARY.—Rainfall nearly an inch above the average. Average maximum temperature, 42.8. Mean temperature, 37.0 (below average). A changeable unsettled month. Snow on nine days

but never remained long. A spell of severe weather the 5th to 8th, and from the 20th to 23rd. Severe gales on the 17th and 19th. Winds, chiefly N.W.

MARCH.—Rainfall $1\frac{1}{2}$ inch below the average. Average maximum temperature, 50·6 (above average). Mean temperature, 41·2. First fortnight rough N.W. winds; the last fifteen days, fine (no rain) with bright glorious sunshine the last week; the last three days the maximum shade temperatures were 66·0, 66·0 and 69·9, a March record. Winds, W.

APRIL.—Rainfall $\frac{1}{2}$ inch above the average. Average maximum, 51·6. Mean, 42·9 (below average). A damp sunless month. Cold from the 7th to the 18th, and again the last five days with snow and hail. Frost on five nights. Easterly winds predominated.

MAY.—Rainfall 2 inches above the average. Average maximum, 57·1. Mean temperature, 49·0 (about normal). A dull, cheerless May. Hot on the 11th and 12th, the latter date 80·0 in the screen, which is exceptional for May. Cold and damp the last week, with an excessive rainfall on the 31st—1·18. Winds, W. and N. N.E.

JUNE.—Rainfall nearly 2 inches above the average. Average maximum, 60·6. Mean temperature, 53·5 (below average). A dull cold month. Rough winds and generally unsettled. Winds, S. S.W.

JULY.—Rainfall just below the average, but the number of wet days (20) above. Average maximum, 63·9. Mean temperature, 55·9. Both below the average; in fact we have had few colder Julys. No frost recorded, but several mornings at the beginning of the month low readings were registered. Winds, E., N.E. and S.W.

AUGUST.—Rainfall up to the average. Mean temperature, 47·9. Average maximum, 52·7 (below average). A rather cold month. No hot weather and not much sunshine. The last week fine and pleasant, but not hot. Winds, W. and W. N.W.

SEPTEMBER.—Rainfall $1\frac{1}{2}$ inches above the average. Mean temperature, 55·9. Average maximum, 66·3 (above average). A beautiful hot and bright month, very little wind, six foggy mornings, and eighteen successive days without a measureable rainfall. Predominating winds, W. and E.

OCTOBER.—Rainfall $3\frac{1}{3}$ inches above the average. Mean temperature, 48·2. Average maximum, 55·7 (below average). The heavy fall of rain on the 16th helped considerably to make such a huge total fall. The heaviest October fall during the 40 years was in 1903—7·10 inches. Generally mild, 3 frosts recorded in the screen. Winds, S. and S. S.W.

NOVEMBER.—Rainfall slightly below average. Mean temperature, 42·1. Average maximum, 47·3. Snow on the 25th only. Slight frosts on four nights. Generally calm and mild, rain fell on twenty days. Winds variable, perhaps chiefly S.W.

DECEMBER.—Rainfall slightly above average. Mean temperature 38·1. Average maximum, 42·9. A mild month, first fortnight wet and stormy, afterwards dull, little sunshine. No severe frosts. Below 32° on sixteen nights. Winds chiefly W. S.W., E. and N.E. the last week.

Form sent to every case of Typhoid Fever notified.

BLACKWELL RURAL DISTRICT.

TYPHOID FEVER.

NOTICE TO OCCUPIERS OF INFECTED HOUSES.

It has been brought under my notice that Typhoid Fever is present in your house. You are enjoined by the Public Health Act, 1875, (a) not to allow any person so suffering to leave your premises, (b) or allow any article of clothing worn by the patient to be removed therefrom without previous disinfection.

The penalty imposed for each offence being £5.

Rules for Preventing Spread of Typhoid Fever.

1. The patient should be confined to one room, and no one but the person in attendance should be allowed to enter the room.
2. Curtains, bedhangings, and carpets, and all other articles of dress and unnecessary furniture should be removed before the patient is allowed to enter.
3. Bedclothes and soiled linen worn by the patient, and all such articles as cups, glasses, and spoons must not be removed from the room until they have been well disinfected.
4. Ventilation. This should be secured by opening the windows, and if there be a grate in the room, a fire should be lit.
5. No article of food should be kept in the sick room, and all unconsumed food at once destroyed. The hands of the nurse should be well washed, and the nail-brush freely used after attending to the patient, and before taking food. Food should never be eaten in the sick room.
6. Note well that infection is the same in all cases, whether mild or severe.

Directions for Disinfection.

The infection of Typhoid Fever is chiefly conveyed through the discharges given off by the bowels and bladder, it is, therefore, of the first importance to see that these excretions are properly disinfected as soon as passed.

This may be done by placing Carbolic Acid Powder or Chloride of Lime in the utensils before use, and afterwards freely powdering the discharges with the same disinfectants.

The motions should never be thrown into a privy or on to an ashpit, and if not scavenged by the Local Authority, should be buried some distance from the house with a liberal supply of Chloride of Lime added.

During the progress of the case all soiled linen should be removed from the bed and immediately placed in a vessel of water, to which a large handful of common washing soda has been added. It should be allowed to stand a few hours and afterwards well boiled in the copper.

Cups, glasses, and spoons used in the sick room should be boiled in strong soda and water before they are allowed to be removed from the room.

Special care should be exercised when removing the excretions so as not to permit any portion to fall on the floor, or contaminate any article of clothing.

JOHN O. LITTLEWOOD,
MEDICAL OFFICER OF HEALTH.

Mansfield.

OUTBREAK OF SCARLET FEVER.

Owing to the prevalence of Scarlet Fever throughout the District, it is thought advisable to recommend that your Schools be thoroughly cleansed and disinfected before re-opening after the summer holidays.

The following suggestions are likely to prove of some value in carrying out the work :—

1. That all woodwork be thoroughly washed with soap and water, and the floors scoured with strong soda and water.
2. That all ceilings be limewashed.
3. That the slates be boiled in strong soda and water.
4. That the offices be thoroughly cleansed and limewashed, and the urinals and drains disinfected and freely flushed.
5. That during the holidays all windows and doors be left open so as to secure through ventilation.

That in addition to the above recommendations, special fumigation be undertaken by the Inspector of Nuisances in such schools where Scarlet Fever has been specially prevalent.

JOHN O. LITTLEWOOD, D.P.H.,

Mansfield.

Medical Officer of Health.

Form sent to every case of Scarlet Fever notified.

BLACKWELL RURAL DISTRICT.

SCARLET FEVER.

NOTICE TO OCCUPIERS OF INFECTED HOUSES.

It has been brought under my notice that Scarlet Fever is present in your house. You are enjoined by the Public Health Act of 1875 (1) not to allow any person so suffering to leave your premises, (2) or allow any clothing to be removed therefrom without previous disinfection.

The penalty imposed for each offence being £5.

Rules to be observed for preventing spread of infection.

1. A Patient suffering from Scarlet Fever should, where practicable, be confined to one room, preferably at the top of the house, and into which none but the person in attendance should enter.
2. Curtains, Bedhangings, and Carpets, and all other articles of Dress and unnecessary furniture should be removed before the patient is allowed to enter.
3. The room should be well ventilated by opening the upper sash of the window. The communication through the chimney should be maintained.
4. Sputum, vomit, urine, and fæces should be received into vessels containing some disinfectant (a large tablespoonful of Chlorinated Lime to $\frac{3}{4}$ -pint of water), before being removed from room.
5. Discharges from the nose, mouth, and throat should be received into pieces of rag and immediately burnt.
6. All such articles as cups, glasses, and spoons used in the sick room should be placed in strong soda and water, and subsequently boiled before leaving the room if possible.
7. All soiled linen should be plunged into a vessel of water containing a large handful of common washing soda. It should be allowed to stand for a few hours and afterwards well boiled either in a copper or large iron pot.
8. No article of food should be allowed to remain in sick room, and any unconsumed food should first be disinfected and then destroyed, by burning if possible.
9. The skin of the patient should be kept scrupulously clean.
10. The attendance on the patient should be confined to one person *only*, who when compelled to leave the sick room should avoid mixing with the other members of the household. The hands should be washed with 20% Carbolic Soap.
11. Visitors should not be allowed to the house for at least seven weeks from the commencement of the disease, and then only by the permission of the Medical Attendant.
12. During the last week of convalescence, it is advisable to subject the entire body to a good soaping once daily.

JOHN O. LITTLEWOOD,

Medical Officer of Health.

Mansfield.

Form of Handbill distributed in the District.

BLACKWELL DISTRICT COUNCIL.

SCARLET FEVER.

Scarlet Fever is extremely catching, particularly in the early stages, whilst the Fever is high and the Throat sore, and the danger of infection is the same in all cases, whether mild or severe.

PRECAUTIONS TO PREVENT SPREAD:—

Every child suffering from Scarlet Fever must be separated from all other children for at least 7 weeks after the appearance of the rash.

All the Children in the infected house should be kept from School, and from playing or going about with other children.

The inmates of an infected house should not go to Church or Chapel or attend any public gathering whatever.

“Neighbouring” should be strictly prohibited, and no person should be allowed to visit an infected house until after the peeling of the patient has completely ceased, and the disinfection of the house has been carried out.

As infection exists in the peeling of the skin, the patient must not appear on the public highway until the peeling has entirely ceased.

TAKE NOTICE *that the exposure of infectious persons in public is punishable by law. The Public Health Act, 1875, imposes a penalty of £5 for each offence, and the penalty for such exposure will be enforced.*

JOHN O. LITTLEWOOD,

Medical Officer of Health.

Form of Handbill distributed in the District.

BLACKWELL DISTRICT COUNCIL.

MEASLES.

Measles is a dangerous disease, and is extremely catching.

EARLY SYMPTOMS: Severe cold in the head for 72 hours, before the blotchy rash appears.

Consider every severe Influenza cold as possibly Measles.

PRECAUTIONS TO PREVENT SPREAD :—

Every child suffering from Measles *must* be separated from all other Children for at least 3 weeks after the appearance of the rash.

All the Children in the infected house should be kept from School for a period not less than 3 weeks after the commencement of the last case.

“Neighbouring” should be strictly prohibited, and no person should be allowed to visit an infected house until 3 weeks have elapsed since the last case first commenced.

You should in every case call in a Medical Man.

TAKE NOTICE *that the exposure of infectious persons in public is punishable by law. The Public Health Act, 1875, imposes a penalty of £5 for each offence, and the penalty for such exposure will be enforced.*

JOHN O. LITTLEWOOD,

Medical Officer of Health.

Form of Handbill which has been distributed in the District.

BLACKWELL DISTRICT COUNCIL.

PREVENTION OF SUMMER DIARRHŒA.

This disease only occurs after a prolonged period of heat, and is in a great measure avoidable by the exercise of ordinary care and attention.

The disease is caused by a germ entering the body through bad air, impure water, and contaminated food.

The necessary precautions to be observed are :

1. See that all parts of the house are well ventilated night and day.
2. Decomposing refuse of all kinds should be removed from the house and its immediate neighbourhood.
3. The gullies in connection with the house drains should be frequently flushed during the day, and any faulty drains from which a stench is noticed to arise should be at once reported to Mr. Hill, Inspector of Nuisances, Sutton-in-Ashfield.
4. Food during hot weather rapidly undergoes decomposition, and the greatest care should be observed in the selection only of such as is perfectly fresh and sound, and should never be allowed to remain an unnecessary time in occupied rooms.
5. It is highly essential that food should be thoroughly cooked, animal as well as vegetable, and that the milk should be boiled as soon as received from the hands of the milkman, covered over, and subsequently placed in a cool cellar or larder free from dust.
6. Unripe or over-ripe fruit should be strictly avoided.
7. Children under nine months of age should receive nothing except milk or milk and water, well boiled, except when the milk is obtained from the mother's breast.
8. Feeding-bottles, food-utensils, and any receptacle used for the storage of milk and food should be kept scrupulously clean, and well scalded before use.
9. It is wise to call in Medical aid early, before the disease has had time to make itself seriously felt, and no resort should be made to quack remedies.
10. The above remarks are intended to serve as a guide for the prevention of Summer Diarrhœa in Adults as well as in Infants.

JOHN O. LITTLEWOOD,

Medical Officer of Health.

